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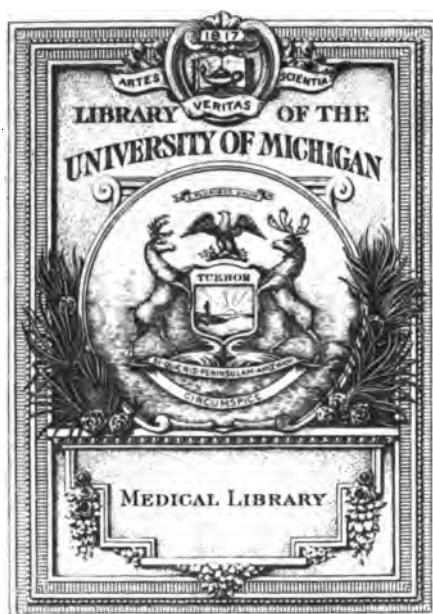
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THE
AMERICAN MEDICAL TIMES

Being a Weekly Series of the New York Journal of Medicine.

EDITED BY

STEPHEN SMITH, M.D.

ASSOCIATE EDITORS,

ELISHA HARRIS, M.D., AND GEO. F. SHRADY, M.D.

VOL. I.

JULY TO DECEMBER, 1860.



NEW YORK:

BAILLIÈRE BROTHERS, 440 BROADWAY.

LONDON:

H. BAILLIÈRE,
219 REGENT ST.

MELBOURNE:

F. BAILLIÈRE.

PARIS:

J. B. BAILLIÈRE ET FILS,
RUE HAUTEFEUILLE.

MADRID:

B. BAILLY-BAILLIÈRE,
CALLE DEL PRINCIPA.

1860.

Entered, according to act of Congress, in the year 1860, by
BAILLIERE BROTHERS,
In the Clerk's Office of the District Court of the United States for the Southern District of New York.

R. CRAIGHAD,
Printer, Stereotyper, and Electrotyper,
Carton Building,
21, 23, and 25 Centre Street, N. Y.

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REPORTS FROM THE FOLLOWING INSTITUTIONS AND SOCIETIES HAVE APPEARED IN THIS VOLUME.

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 UNIVERSITY MEDICAL COLLEGE.

Original Lectures.

CLINICAL LECTURE ON SYPHILITIC DISEASE OF THE LARYNX.

DELIVERED AT THE NEW YORK HOSPITAL.

BY

WM. H. VAN BUREN, M.D.,

SURGEON TO THE HOSPITAL.

GENTLEMEN:—In our last public visit you remember we examined several cases of syphilis, and that there was one patient to whom I called your attention for a moment, who wore a tube in his trachea. That case belongs to a very interesting class, which is, perhaps, too much neglected, and I have thought it worth our while to spend a few moments in studying its history, and the character of the affection of the larynx which rendered the insertion of the tube necessary.

This affection is known by the name of syphilitic disease of the larynx. It is one of those forms of syphilis which, happily for humanity, is rare, but still it is not uncommon to find in a hospital of any size, one or two men as nurses, wearing these tubes. I remember very distinctly the case of a nurse in La Charité Hospital, of Paris, twenty years ago, who had worn the tube for a number of years.

The term laryngitis is applied correctly to purely inflammatory affections. The disease, however, now under consideration is not an inflammation of the larynx, but is the result of the manifestation of syphilis in that part of the organism.

In order that you may recall all the features of this case I will read an abstract of it, which I have received from my colleague, Dr. Markoe.

JOHN BARBER, *et al.* 35, English seaman, admitted to the New York Hospital, Oct., 1859, with syphilitic sore-throat and laryngeal disease. Had chancre six years ago, followed by secondary symptoms, amongst which was sore-throat; which has since then recurred six or seven times, but the larynx was not involved until the last attack in 1858, for which he was treated in the Hospital; he had then hoarseness and tenderness of the larynx on external pressure, which yielded to anti-syphilitic treatment, and he was discharged, apparently cured, in January, 1859. In about nine months he was readmitted with his present attack, which, like the former ones, was characterized by ulceration of fauces, with hoarseness, pain, and tenderness about the larynx, cough, mucous expectoration, and occasional paroxysms of dyspnoea. The attack was more severe than any of his previous ones, but it gradually yielded and he assumed the duties of a nurse in the Hospital; treatment employed: mild mercurials, cinnabar fumigations, iodide of potassium. About the 1st of February, the throat was again attacked, and still more severely, by reulceration of pharynx, hoarseness, dyspnoea, and extreme tenderness of larynx.

On examination by the finger the epiglottis felt, "irregular, contracted, and thickened." On February 8th, the following was the note taken of the case: "Patient cannot lie down through dyspnoea; expiration seems to be effected with more difficulty than inspiration; expectoration very copious—of viscid muco-purulent matter, and effected with much pain; deglutition excessively difficult—can swallow fluids only."

Under the steady and cautious use of the remedies already mentioned these extreme symptoms yielded during the following week, and the patient's condition improved somewhat, his gums being distinctly sore from mercury at the time of the amendment. But the improvement was not progressive; he still suffered from frequent paroxysms of

dyspnoea, relieved by copious expectoration; the amount of this latter was excessive; his pulse continued above one hundred, with much emaciation and debility, and great difficulty in swallowing; lungs free from disease. In this condition the operation of bronchotomy was decided upon with the view simply of facilitating the function of respiration, and, by placing the larynx at rest, of contributing to its restoration. The operation was done on the 20th of February (by my colleague Dr. Markoe, who was then on duty, and to whose note of the case I am indebted for the facts just stated). A double canula was introduced through the crico-thyroid membrane.

The immediate consequences of the operation were most favorable. Expectoration diminished, together with the constant and annoying hawking, spitting, and coughing; breathing entirely free. Capacity to take solid food returned in a few days, and sleep was undisturbed. On the 27th his pulse had fallen to 90 (from 120), and on the 9th of March he is reported to be gaining rapidly, to have lost his phthisical look, and to be growing fat.

Now, gentlemen, you have the case before you. From the last note, March 9th, to the present day (May 25th), he has been doing perfectly well. He breathes entirely through this double canula. The larynx being, as it were, thrown out of gear, the man cannot speak unless he closes the opening into the trachea and throws the column of air past the vocal cords, which, in consequence of the construction of the tube, can easily be done.

The wound through which the tube is lodged in the trachea is very apt to close when the instrument is left out any time; two hours is sufficient to make the granulations which surround the opening to contract sensibly, and if left out for twenty-four hours it might be impossible to return it.

I remember one patient upon whom I operated twelve years ago, in Bellevue Hospital, for this same disease. One day the House Surgeon, having removed the tube for the purpose of cleaning it, was suddenly called from the ward to attend an obstetrical case, and found it impossible for him to return immediately. In less than two hours after he was sent for in great haste, with the intelligence that the patient who had been thus left was dying. On arriving in the ward he found that the wound had contracted to such an extent, as almost to prevent his breathing; the face was dusky, the lips livid, and there were all the symptoms present of impending suffocation. The Dr. attempted to reintroduce the tube, but found that it was impossible. I arrived about that time, having been sent for in great haste, and with the aid of a probe-pointed bistoury succeeded in replacing the tube. As soon as this was done, the patient breathed freely, the livid hue left his countenance, and he was restored to his former comfortable condition.

In making a few remarks on this case, I wish to discuss, first, the pathology of the disease; second, what are the chances of an ultimate cure, and, finally, what is the value of the operation of bronchotomy in this condition.

As to the nature of the affection, it is properly termed syphilitic disease of the larynx. It is a disease which is not treated much of in text-books, and consequently to the mind of the student its character is apt to be left in a state of obscurity. It is for this reason that I have asked you to study the disease with me this morning.

Syphilis chooses the throat as one of its favorite localities. We all know that sore throat is very apt to occur after an infecting chancre; that in many cases it is either persistent or is very likely to return. We know also that such affections of the throat present themselves in every phase, from a simple erythematous blush to extensive and destructive ulcerations. We have frequently seen this diseased condition occupy every part of the fauces, sometimes extending into the Eustachian tubes, producing deafness, or again perforating the velum, and not unfrequently causing it to adhere to the back of the pharynx. I had under my care a

case in the adjoining ward, in which the *velum pendulum palati* was adherent to the back part of the pharynx in such a way as to cut off all communication between the mouth and posterior nares. The breath had literally "departed from his nostrils," and consequently he lost the power of smell.

I refer to this case merely to show how important functions may be interfered with by the ravages of this destructive disease.

This same disease of the throat is liable to extend and involve the larynx, affecting in succession the mucous membrane of the epiglottis, and of the arytenoid cartilages, and attacking the *chordæ vocales*, in which case there is alteration of the voice present, or, narrowing of the chink of the glottis, with obstruction of respiration. This affection of the larynx, then, is identical in character with that of the throat, by which it is almost invariably preceded. The fact is one of sufficient importance to warrant its reiteration, viz.: that you rarely find syphilitic laryngitis occurring before, or unaccompanied by, ulceration of the throat.

Now, in reference to the forms that the disease puts on. You may see it presenting itself with simple hoarseness of voice (*vox rauca*), which is a symptom somewhat characteristic of syphilis; then again, it may be nothing but an ordinary catarrh of the membrane, and this is its mildest form. If the patient has the disease sufficiently developed in his system, it will present itself either in permanent thickening of the mucous tissue, or advance to positive ulceration. These ulcerations are liable to occur in any part of the surface of the larynx, and they follow the general law of syphilitic ulcerations in other parts of the body, concerning the characters of which you have had abundance of opportunities to learn. We have here upon the table an instance in which the epiglottis has been entirely destroyed by this disease.

I will mention, in passing, that a loss of this part (epiglottis) does not interfere with deglutition. There is a specimen in the museum of Dr. Mott, in which the epiglottis was found wanting at the post-mortem examination, but in which during the life of the patient there was no symptom that led to the suspicion of such a deficiency.

These ulcerations may extend from the larynx unto the trachea, bronchi, or even into the lung tissue itself. These facts are pretty well substantiated by the recent researches in Germany and France, more especially by Virchow of Berlin, Depaul, Diday, and Gubler.

It is probable that as our attention is directed more and more to this subject, it will be found that there are certain forms of bronchitis, if not pneumonia or phthisis, that have their origin in alterations depending upon the syphilitic poison. This is a fact that has been in a measure proved by Virchow, one of the greatest pathologists now living, and whom we should consider, from the rare opportunities he has of investigating the disease, as the highest authority upon the subject.

Syphilis, as I remarked before, prefers certain localities to others—thus upon the skin we notice eruptions, most frequently at the roots of the hair, around the face, and in the neighborhood of the genital organs. In like manner it has its points of preference upon the mucous membrane, and is most frequently met with in the throat, while in the intestinal canal it is very rarely seen, except at the lower end of the rectum.

In regard to the cause of these eruptions or ulcers, I can only say that they seem to be the result of an effort on the part of the economy to eliminate a poison; the secreting glands being irritated to a greater or less degree in consequence. The striking tendency of these eruptions is to run into ulcerations; they, however, are not of a phagedenic character, yielding readily to the anti-syphilitic treatment. Neither do they involve danger to life, unless by their situation they interfere with the function of some vital organ. In connexion with this tendency to ulceration, there is an effusion of a certain material which is as characteristic of syphilis as are tubercles of phthisis. I refer to the *gummy tumor* of the French. This peculiar exudation is deposited

under the skin in masses, going to form papulæ, elevations of greater or less size, even entering into the constitution of soft nodes. These deposits are not unfrequently met with in the substance of the tongue, and Ricord refers to one situated in the substance of the heart itself. This, then, is one of the peculiarities of syphilis.

The worst form of syphilitic laryngitis is that in which not only the mucous membrane but the perichondrium is the seat of the disease. The cartilage of course dies, and if the extent of such destruction is by any means considerable, the case must terminate fatally. The existence of this disease is made out without difficulty, from the odor of the breath, which is quite peculiar, being of even a more rancid odor than that which emanates from necrosed bone.

In the case that I alluded to as having been operated upon some ten years ago in Bellevue, there was an exfoliation of bone from the back part of the cricoid cartilage which of course had become ossified. The cartilages of the larynx are, as you know, liable to ossification, and true bone may be found in the posterior portion of the cricoid cartilage at any time after the twenty-fifth year.

In regard to the diagnosis of syphilitic laryngitis. There are certain diseases of the larynx which may be mistaken for syphilitic disease, but I have alluded to one fact, that if remembered, will always lead to a right conclusion. It is this: You cannot have syphilitic disease of the larynx except the throat is the part first affected. This fact can generally be determined by an inspection of the part. Whenever you have cough with laryngeal trouble, and syphilitic antecedents, there can be no difficulty in arriving at a proper conclusion. There are, however, certain forms of disease which may give rise to some doubt in your mind. I allude more particularly to the disease known as *phthisis laryngea*. You know, in the latter stages of the disease, that phthisis is very apt to affect the larynx in consequence of the irritating quality of the material expectorated; this, however, is only a concomitant ulceration, and has nothing to do with the subject in hand. The true laryngeal phthisis was first described by Porter of Dublin, who considers it an alteration of the cartilage of the larynx, by means of which death of the parts takes place, giving rise to the formation of abscess, attended with difficult breathing, pain in deglutition, hectic fever, and the like. Generally speaking, the breath gives the odor of dead cartilage, the thickening around the larynx, and also the presence of an abscess behind is quite characteristic. This disease, however, is very rare, occurring in middle-aged persons; generally follows some catarrhal affection; occasionally it may be brought on as the result of violence. Sometimes the antecedent history is all you can rely upon in coming to a determination.

With regard to the means of examining the larynx, there is a word to be said:—When the epiglottis or upper opening of the organ is affected, you can often, with your finger, feel the lesion. This is one of those little pieces of mechanical dexterity that you must accustom yourselves to, and it is one of those accomplishments which can be acquired only by practice. A very good plan is to practise palpation upon the cadaver in the absence of other opportunities. Another means of throwing light upon these affections is the use of the *laryngoscope*. I hold in my hand one of the varieties of a form of instrument which is of a great deal of use. Here is a mirror pierced through its centre by a small hole, and here are several steel plates attached to handles. The patient is placed with his back to the light, and you in front of him look through the opening in the centre of the mirror at the throat, which is illuminated by the reflected light. The parts around the top of the larynx are reflected on the surface of the steel mirrors, which should be dipped in warm water before using, to prevent cloudiness from vapor.

With regard to the prognosis in this disease what have we to say. Can we cure it? That is the great question. All manifestations of syphilitic disease, when advanced to a certain stage, are notorious for their incurability, and the

affections of the larynx are particularly so, for the reason that the parts can never be kept at rest. Consequently, diseases of this part are more fatal than any others.

The treatment of this affection is twofold—in the first place constitutional, and in the second place local. The constitutional treatment is that of syphilis in general. You have heard that treatment recapitulated in a few words in the notes of the case just read, viz., mild mercurials and the iodide of potassium. It may be proper for me here to make a remark in relation to the use of mercury in so-called tertiary syphilis. These symptoms of the disease so designated are undoubtedly in many cases best treated by mercury. But as to the mode of using the mercury, I have a word of advice to give. You must not rely upon the medicine alone to cure the disease; it must be given in such a manner as not to interfere with the nutrition of the individual, otherwise it does more harm than good. To this end mild mercurials, fumigations, inunctions, and the like are resorted to, that our patients may grow fat at the same time the disease is being cured. Syphilis is a curable disease, but we don't know when it is cured. The treatment must be chronic to cure a chronic disease; in some cases not giving up the persevering use of these milder mercurials inside of 18 months or 2 years. If patients die from this disease, it is either from neglecting themselves, or, which God forbid, by the neglect of the surgeon in attendance.

Fumigations by cinnabar is an old remedy, and were it not for the irritation that it produces in most cases it would be a very good one. I have substituted instead of this remedy the metallic mercury, calomel or black oxide. Each one of these, I think, possesses all the good qualities of the cinnabar, but without any of its unpleasant effects.

Finally, of what advantage is bronchotomy. The patient before us answers that question, I think, satisfactorily. It can assist you by enabling the patient to breathe without his larynx, by quieting that larynx so that your mercurial administration may cure the ulcers. In this way it will prevent the death of your patient by an interference with the functions of that vital organ. Suppose we had treated the case never so skilfully without that tube. What would have been the result? He is now so situated that we can treat him at our leisure. He may not be able to remove the tube even after the disease is entirely cured, inasmuch as it is possible that there may be some permanent obstructions higher up, the result of the contraction of cicatrices. It depends then upon the extent of the lesions in this man's larynx whether he shall be able to dispense with the tube or not.

We ascertain if the larynx is permeable to air by directing him to place his finger over the mouth of the canula for a few minutes at a time. The next step is to insert a cork into the tube; let it remain at first half an hour at a time, and cautiously extend the time to 3 or 4 hours; and finally when he can tolerate its presence for 24 hours at a time, the whole instrument can be removed with a good deal of certainty that no unpleasant results will follow. As bearing particularly upon this point, I cannot resist the temptation to refer to a case of membranous croup in a child 3 years old, in which I have very recently performed the operation of tracheotomy, as a last resort to prevent suffocation. Subsequently to the operation the disease did not extend, as it is so apt to do, into the bronchi, consequently the child recovered. One week after the operation the cork was worn in the canula all day, and on the following day it was removed altogether, in 3 or 4 hours after which the opening closed so as to compel the air during respiration to escape by the natural passage.

This, gentlemen, is all I have to say in relation to syphilitic laryngitis, and if I have succeeded in so interesting you in this subject that you are led to study the disease, I shall have accomplished my object.

Original Communications.

FISTULOUS ULCER IN FRONT OF THE LARYNX.

BY JOHN WATSON, M.D.,

SURGEON TO THE NEW YORK HOSPITAL.

THE facts connected with the two following cases, relate to a local ailment not often recognised by surgical writers; an ailment apt to be misunderstood, and one which, even when properly recognised, has hitherto not usually been found amenable to treatment.

Case First.—On the 6th of April, 1838, I saw in consultation with a gentleman of considerable surgical experience, a young lady, Miss C., about twenty years of age, who for the previous two or three years had been troubled with a papillary ulcer in front of her neck immediately over the thyroid cartilage, and from the centre of which there had been a continual weeping of a glutinous transparent colorless fluid, like inspissated synovia. Several attempts had been made by the gentleman in attendance, and by others, to close this ulcer, but without effect. Milder means proving of no avail, the ulcerated integument had been excised, under the hope that a newly exposed surface in the healthy skin might take on the process of cicatrization. But after the wound had contracted to a small point, the glutinous discharge, which had not been arrested, continued to keep the parts from closing. Again a second and more severe operation had been undertaken, in which the integuments for a wide space around the ulcer were excised, and the edges of the wound were drawn together by suture, so as to favor union by the adhesive process. The only effect of this measure was to leave an unsightly transverse cicatrix, which greatly disfigured the exposed surface. When I first saw the patient, the ulcerated opening in the centre of this cicatrix was hardly large enough to admit the point of a delicate probe. But after penetrating through the orifice, the instrument slipped readily onwards for about an inch under the integuments, in the median line, upwards in front of the thyro-hyoid ligament, to the border of the os hyoides, where it rested. On withdrawing the probe and grasping the parts along which it had passed, I could feel beneath the skin a delicate cord-like track of induration, such as might result from the indurated parietes of a narrow fistula.

After some deliberation, seeing that the true character of the case had not hitherto been appreciated, and bearing in remembrance that I had often cured obstinate fistule in other parts of the body by injecting them with corrosive sublimate, I advised the gentleman in attendance, first, to inject the fistulous track with pure water, so as to cleanse it, and then to throw in, through a delicate canula introduced to the bottom of the fistula, as much as the parts would contain of the following solution:

℞ Muriatis Hydrargyri
Muriatis Ammonia, aa gr. v.
Aque pure ʒi.

M.

It is sufficient to add that a single application of this solution arrested the glutinous discharge, and led in a few days to the permanent cure of the fistula. I last heard from this young lady on the 1st of July, 1839. There had been no return of the disease, her health was good, and she was then preparing for her approaching marriage.

Case Second.—On the 17th of May, 1850, Mary Kelly, aged 17, entered the N. Y. Hospital, with a minute ulcer in front of her neck, over the thyroid cartilage, giving issue to a glutinous discharge corresponding in all respects with that observed in the previous case, and surrounded by a rugged and irregular cicatrix about an inch wide, the result of escharotic applications that had, among other

means of treatment, been employed to no purpose. The discharge in this was more glutinous than in the former case, and when not frequently washed off, would form a thick crust over the ulcerated surface. The fistulous track would not admit an ordinary probe. I was obliged to employ a delicate gold probe intended for the puncta lachrymalia, in order to enter it. But the instrument, as in the other case, after passing the orifice, readily reached the anterior border of the os hyoides, passing in as before, through a track in the median line, somewhat over an inch in length, and the parts here, when grasped, giving the same feeling of cord-like induration.

After dilating the fistula by the use of probes of various sizes, the same course of treatment was employed as in the other case. The house-surgeon, however, mistaking my directions, at first employed a solution of only two grains of corrosive sublimate to the ounce of water. With this he injected the fistula several times with no apparent benefit. But on increasing the strength of the solution to four grains, a single injection arrested the oozing, and in the course of a few days effected a permanent cure of the fistula.

While recording these facts, I have some obscure recollection of an earlier case of the same ailment, the particulars of which I cannot now recall. I have since heard of a recent instance of the same sort, in which the gentleman in charge had been baffled in his efforts to effect a cure. And on mentioning these circumstances to my friend, Dr. A. H. Stevens, he remarked, that they reminded him of similar cases which, many years ago, had given him much embarrassment.

The rationale of these cases would seem to be, that the first point of diseased action is in some minute bursa, or cyst, near the anterior border of the os hyoides, and that the fistula is first established, and afterwards kept patulous, by the glutinous discharge secreted there.

I have not attempted a minute inquiry into the history of this ailment, as given by the surgical writers of England or our own country; but in the few of their works to which I have referred, I have found little or nothing satisfactory. So far as I am aware at present, we owe the first allusion to this disease to Boyer, who appears to have met with two cases of it, which he treated unsuccessfully by the knife and escharotics. He speaks of it as an encysted tumor forming between the os hyoides and the thyroid cartilage, containing a viscid yellowish fluid, and subsisting a long time without acquiring any considerable size, or causing any embarrassment, but disfiguring the neck, especially of females. [*Maladies Chirurgicales*, tome vii., p. 39; Paris, 1834.] In the *Eléments de Pathologie Chirurgicale*, prepared under the supervision of M. Nélaton, vol. 3me, p. 383, I find an allusion to the same ailment, apparently derived from Boyer, but with some additional details derived from the researches of Béclard and M. Malgaigne, especially in reference to the normal existence of two bursæ in the locality occupied by this fistula; the one, over the projection of the thyroid cartilage; the other, somewhat above this, in the thyro-hyoidean space. The writer in question is disposed to believe that the source of the glutinous discharge is some mucous follicle near the base of the tongue, founding this opinion on what he assumes to be the fact, that the discharge is rather of a mucous than of a serous character. The truth, however, is, that the discharge is such as we often meet with in openings communicating with the joints, and such as I have often seen issuing from diseased bursæ. He speaks of treating the disease by iodine injections.

Dr. Gross, in his recent systematic work, while treating of injuries and diseases of the neck, alludes to what he calls the "*Synovial Bursa*," in the following words: "An encysted tumor sometimes forms in the upper and fore part of the neck, taking its rise in the synovial sack situated between the hyoid bone and the notch of the thyroid cartilage. This sac, which, in its natural state is hardly a few lines in diameter, may, in consequence of inflammation,

acquire the volume of an egg, if not of a small orange. It is of oblong shape, elastic, slightly translucent, and filled with a thin, serous, oily, or viscid fluid. The superincumbent skin is healthy, and the swelling is entirely free from pain. The treatment is by seton, injection, or incision, as in encysted tumors in other parts of the body." [*System of Surgery*, vol. ii. p. 545.]

Tumors such as are here described, I have myself occasionally met with. I have not considered them pathologically identical with the disease giving rise to the fistulous ulcer. But whether both may or may not be looked upon as different phases of the same malady, I will not at present undertake to determine.

NEW YORK, May 28th, 1880.

ANÆSTHESIA AND ANÆSTHETICS.

BY EDWARD R. SQUIBB, M.D.,

OF BROOKLYN, N. Y.

THE condition of insensibility to pain belongs exclusively to the brain proper, or to that part of the nervous system which provides for sensation and voluntary motion; and is effected, when not the result of mechanical injury, invariably through the agency of the circulation. It therefore follows upon this, and upon the circumstance that the nervous centres of organic life exercise no primary function of ordinary sensation or voluntary motion, that the special agents resorted to for anæsthetic purposes should not only be directed especially to the sensorium, but should be diverted as far as practicable from the remaining portions of the nervous system, in effect. But, the circulation carries the anæsthetic agent everywhere, and with the elements of vitality and molecular reproduction must convey and distribute this powerful agency also; and hence the special agent for effecting anæsthesia should not only act directly, promptly, and transiently upon the sensorium, but should be, as far as possible at least, innoxious elsewhere. In short, it should suspend the functions of the sensorium without liability to interference with any other organ or function.

Such an anæsthetic effect is produced perhaps in the greatest degree of perfection by a certain amount of concussion of the brain, which sometimes results from accidental violence; and the effect is most perfect here, because it is produced directly upon the brain without any contamination of the circulation with foreign influences; and the circulation thus left free for the performance of its normal functions not only preserves the organic life intact during the temporary abstraction of the presiding sensorial functions, but through its reparative agency quickly remedies the shock, and restores the brain to its normal condition.

The next most perfect anæsthetic effect is that to which a small proportion of persons are susceptible, wherein the sensibility to ordinary impressions of pain or injury is suspended or overpowered through concentric nervous effect. Whenever the balance of nervous power is so disturbed as to reverse the current of the nervous batteries (so to speak), as in the so-called mesmeric condition of certain persons of feeble nervous tone or energy; and in the high degree of nervous excitement to which others are liable through agencies that act altogether from without, the æsthetic functions of the sensorium are altogether suspended, as in catalepsy, or are so impaired that serious injuries are unconsciously received.

The effect, however, in both these classes of cases can never be utilized if from no other cause than because it is independent of the circulation, and all other practical means of production, maintenance, and control. The circulation therefore becomes indispensable as the means of introducing the anæsthetic agent, and of controlling its effect; and the collateral circumstance that the circulation must inevitably carry the agent to parts where it is not

desired, and where it may become noxious, must be taken as a drawback, and a most important indication in both the selection and management of the anæsthetic to be used.

From these circumstances, and inductions taken as points of departure, it is not difficult to deduce the indications in the use of anæsthetics as being, first, to suspend sensation and voluntary motion; and, secondly, to do this with the least possible interference with the functions of organic life. These points admitted, and kept prominently in view, will, with a little reasoning, render the management of anæsthetic agents very simple, and will make the accidents and mismanagements more intelligible and more easily avoided.

These accidents are, first in importance as well as in frequency perhaps, some form or degree of asphyxia. All the vapors used for anæsthetic purposes are irrespirable. That is, they do not contain oxygen in a condition in which it is available in the lungs for renewal of the blood. Just in proportion, therefore, as the vapor is introduced is the normal quantity of air diminished, and the proper oxidation of the blood prevented; and the ratio of this proportion is as inevitable in the effect upon the powers of life as it would be if carbonic acid or water, or any other irrespirable medium was substituted even up to that proportion which produces spasmodic closure of the glottis. It has been not unfrequently noticed, in what the writer believes to be the mismanagement of both the common anæsthetics, that the administration has commenced with a proportion of the vapor so large as to produce this spasmodic closure of the glottis. Under such circumstances, if it was possible to keep up such a proportion throughout the struggling of the patient, the spasmodic closure would doubtless be as persistent as it is in drowning. But when from withdrawing the sponge a little, or from the displacement of it in struggling, the proportion of air is increased, the glottis is relaxed again, and the imperfect respiration goes on quickly to a point when, from the undue, sudden, and depressing effect of the anæsthetic on the nervous centres, the glottis no longer responds to the action of the irritant, and the vapor passes freely into the lungs, no matter how strong or how small the proportion of air mixed with it. The pulse and respiration then give the indications to suspend and reapply the anæsthetic, and it becomes a matter of time, endurance, and of management as to how far the powers of life are taxed.

It is, therefore, not a question as to whether aeration of the blood is to be interfered with at all, or not, since some portion of anæsthetic vapor is indispensable, and since that portion must exclude a corresponding portion of the air; but the question is rather, how far the due aeration of the blood may be judiciously and safely interfered with;—or in other words, what degree of asphyxia is justifiable and proper in the management of anæsthetics; and the natural conclusion is as practical as it is logical, namely, that the least possible degree is safest and best, and that the interference should not be hurriedly induced, nor maintained a moment longer than is absolutely necessary.

If suspended animation from the circulation of venous blood in the brain was to be resorted to for anæsthesia, it would be necessary to immerse the patient at intervals in water, carbonic acid, or other irrespirable medium, in order to maintain the condition; and the risk of fatal asphyxia would be here much more apparent, though really not very much more imminent than in the nearly parallel case wherein the irrespirable vapor of ether is substituted throughout a clinical lecture, with the antagonistic stimulant effect of the operation postponed till near the end of a long period of insensibility. The position that the insensibility in ordinary anæsthesia is due to the circulation of unrenewed blood in the brain is, however, only true in part at the utmost, and this introduces another of the accidents that may occur in the management of anæsthetics.

If it were possible to separate the true desirable anæsthetic effect from every vestige of asphyxia on the one

hand, and from all direct interference with the functions of organic life on the other, it would probably be found to consist in a simple specific paralysis of the nervous ganglia of sensation; and the desirable degree of such effect would be that which did not at all overreach the object. By overreaching the object however, whether it be by a too profuse, or a too prolonged use of the agent, the result must be injurious, since suspended function is but one step in the catenation which leads to disorganization and death,—and that step once passed the others may be accomplished insidiously. Such an hypothetical position is, however, only assumed to show that there must be a condition of hyperanæsthesia, or excessive anæsthetic effect,—that such a condition is hurtful and unsafe, and that it should be avoided by skill in management, no matter how safe the agent used may be considered.

That such conditions do not occur without warning through the failing functions of organic life, is the fortunate result of the harmony and dependent action of the nervous centres, and these functions of organic life are commonly and very properly watched, as the means of control in the administration of anæsthetics. But apart from the fact that a most hurtful and dangerous degree of asphyxia may be induced suddenly, and while both pulse and respiration are spasmodically kept up by the stimulus of the first effect of the agent used, there are grave accidents which occur to the centres of organic life, both by reflex action from the brain proper, and by the presence in the circulation of such powerful depressing agents. Blood overcharged with anæsthetic vapors, and particularly when imperfectly aerated and slowly circulated, must necessarily fail of its due impression upon the cardiac and respiratory ganglia, and paralysis of the heart, or muscles of respiration are, therefore, the common fatal accidents of anæsthetic practice.

All these circumstances lead directly to the conclusions, first, that anæsthetics should be given slowly and carefully, with free, unlimited admixture of air, so that there should never be any choking or spasmodic action of the glottis. Secondly, that they should only be given at the time when the effect is needed, and be abandoned the moment the necessity is past. Thirdly, that not only should the pulse and respiration be watched carefully during the whole period of insensibility, and be kept as near the normal standard as possible, but the slightest amount of blueness or lividity should be regarded as an indication of asphyxia, and be promptly responded to by a more free admission of air.

In the choice between the two anæsthetics in common use one or two points are deserving of attention.

Chloroform is much less liable to produce cyanosis or asphyxia, because it is effective in much smaller quantity than ether, and does not therefore displace so much air in the respiratory process. The writer has never noticed any degree of blueness from the use of chloroform, but has often seen it in the use of ether. On the other hand, unless chloroform be given with far more care than is necessary with ether, it is, from its greater efficiency, much more liable to produce hyperanæsthesia, and to paralyze the heart and respiratory muscles. Hence chloroform, under ordinary circumstances, must be considered more dangerous to life, because its greater efficiency and activity, while they render it less liable to produce asphyxia, render it more liable to produce the other accidents of anæsthetic practice. The balance against it is, however, more applicable to its common and indiscriminate use, than when applied with the care and precaution indicated in the foregoing remarks; and there is probably quite a large class of cases in which it cannot judiciously be replaced by any other agent, as, for instance, in parturition; in uremic convulsions of gestation and parturition; and, in short, whenever an intermittent and prompt effect are desirable, and the due precautions can be rigidly observed. In careful practice, with ordinary good judgment and observation, it has in the writer's opinion, the advantage over ether in

every point except the single important one that, in rare instances, it is liable to produce sudden fatal paralysis of the heart.

Ether has been regarded as so safe an anæsthetic, that it is scarcely admitted as susceptible of doing harm; and the impression is very common that it can never endanger life. That either of these propositions can be accepted admits of great doubt.

In the asphyxia from drowning, if the immersion be of short duration, and if the muscular system has not lost its vital tonicity, it is usually only necessary to re-establish the respiration and circulation for a short time, by artificial means, to restore life. If that drowning be prolonged, however, by repeated short immersions, so that the same inefficient condition of the circulating blood be brought about during a half or three quarters of an hour of struggling, and with depressing influences from other sources, as of previous disease or injury, so that the powers of endurance are worn out, and passive exudations are permitted to accumulate and obstruct the pulmonary air cells, the result would probably be very different. A condition of vital depression would be established which might very slowly go either way in the balance between life and death, but which would probably, in case of other coinciding influences, as after a serious surgical operation, ultimately terminate fatally. The partial asphyxia produced by a prolonged etherization is a nearly parallel case under ordinary circumstances; and here, as in other instances, pernicious influences may be masked by the complication and remoteness of the results.

So strongly has the writer's attention been drawn to these circumstances, by seeing and hearing of the profuse and wasteful use of ether, that it is a prominent object of this article to invite the profession to a closer scrutiny and observation of the effects; and if two or three fluid ounces of ether be found to produce a safer and better effect than double that quantity, an important point will have been attained.

The method of administering ether adopted by some close observers is one which appears well adapted to ensure a due admixture of air. A folded napkin is rolled into the form of a cylinder, or truncated cone, and secured at the overlapping edges by two pins. The larger end is made wide enough to cover the nose and mouth, the nose fitting into a notch, where the two edges of the napkin at the widest end fail to overlap. The opening at the small end should be at least one and a half inches in diameter, and the larger the better. If anything be needed to give stiffness and form to this cone, a piece of pasteboard laid between the folds of the napkin before it is rolled up, will accomplish this purpose. This cone is held in the hand of the person who gives the ether, and as a matter of economy it may be removed from the face during each expiration. About two fluidrachms of ether is poured upon the inside of the napkin at a time, and renewed as often as may be requisite.

In the administration of ether for anæsthetic purposes, at least three well-marked stages are commonly observable, and the duration of each varies very much with the temperament of the individual, the condition of the stomach, and the quality of the ether used. One of these stages, namely, that of excitement and delirium, and the only troublesome one, has been hitherto supposed to be shorter in proportion as the ether contained less alcohol; but some very recent observations made by the intelligent House-Surgeon of the New York Hospital, Dr. Weir—though as yet very limited in number—would appear to indicate that the point of maximum, or best effect in this respect, may be overreached, or that a determinate small proportion of alcohol in the ether may be useful. At least, Dr. Weir has been very naturally led to this inference by the effect of giving a small amount of brandy before the anæsthetic; and subsequently by the use of alcoholic ether. He, however, states distinctly, that as yet his observations are not sufficiently numerous to be relied upon. An occasional

accident in the prolonged use of ether, for the mention of which the writer is also indebted to Dr. Weir, is the occasional occurrence of a smart, ephemeral, irritative fever, which follows within twenty-four hours. In view of the circumstance that the local effect of ether is irritant to the extent of producing vesication when confined upon delicate surfaces, it may be easily understood that its application over the large and delicate mucous lining of the bronchial ramifications, throughout an unusually tedious and difficult operation, might produce a transient inflammatory effect. In conclusion, the writer is aware that the character and drift of these remarks are directly at variance with the teachings of some very high authorities, who regard the anæsthetic condition as one of dead-drunkenness, and who advise the rapid and copious administration of the ether, in order to reach this condition in the shortest possible time.

It appears to the writer singular, that those who are in the daily habit of making the most delicate distinctions in diagnosis, should fail to discriminate between the effects of poisonous doses of alcohol and the desirable condition in ordinary anæsthesia, since they certainly do not much more nearly resemble each other than the coma of narcotism resembles natural sleep.

BROOKLYN, May 28th, 1860.

A CASE OF STONE IN THE BLADDER—HIGH OPERATION—UNSUCCESSFUL RESULT.

BY JAMES R. WOOD, M.D.,

SURGEON TO BELLEVUE HOSPITAL.

THE high or supra-pubic operation for calculus of the bladder is not often practised at the present time, and it is rare that any surgeon selects it in preference to the lateral method. In certain cases, however, it is still preferred by many surgeons as in lithotomy in the female, and in children, while in some cases, as where the stone is very large, the prostate greatly enlarged, or other peculiarity renders the lateral operation difficult or impossible, the supra-pubic method must necessarily be adopted.

In the following case the high operation was decided upon after consultation with my colleagues on account of the existence of a greatly enlarged prostate, and the remains of an old stricture. The notes have been kindly copied from the Hospital Records, by Dr. Eugene Peugnet, house surgeon:

Ward 17, Male Bed 11.—David Gibson, æt. 58: Ireland; weaver; married; temperate in his habits; bad constitution. Admitted Feb. 20th, 1860. (Service of Dr. Jas. R. Wood.)—About four years since patient was treated, in private practice, for chronic cystitis and stricture of urethra. At that time there were two strictures distinctly perceived, one in the membranous portion, and the other in the prostatic portion of the urethra, directly behind the triangular ligament. There was also a false passage situated anterior to the first stricture. The prostate was very much enlarged, measuring about two inches laterally; a No. 5 sound being at that time passed with great difficulty. The urine, which was examined from time to time, contained abundance of triple phosphate, pus, and viscid mucus, together with albumen dependent on the blood. The patient occasionally passed small crystals of triple phosphate, which caused him a great deal of pain, particularly when passing the seats of the strictures. Patient had never contracted gonorrhœa, but in his early youth had been accustomed to ride a great deal upon horseback. At the date of admission his general health was poor. The strictures had been somewhat relieved, and a No. 10 sound could be passed with difficulty, though the patient had still considerable difficulty in urinating, the use of the catheter being frequently necessary. On further examination, a calculus was discovered in the bladder. The prostate measured about three inches laterally. The patient

complained of considerable pain in the small of his back. On analysis and microscopical examination of the urine, it was found to contain pus, mucus, and triple phosphate, together with albumen and blood.

April 7th, 2 P.M.—Patient was put under the influence of an anæsthetic with difficulty, by Dr. J. J. Crane, there being a remarkable muscular rigidity, and the bladder having been injected with $\frac{3}{4}$ xiv. of tepid water, Dr. Jas. R. Wood, assisted by Drs. Parker, Buck, and C. T. H. Meier, proceeded to perform the high operation for stone. The Doctor first made an incision three inches in length just above the pubes, in the median line, successively dividing the abdominal layers, down to the bladder, and going through the linea alba. The organ being very readily exposed, it was seized with a double hook and drawn downwards by Dr. Meier, the lips of the wound being separated and the peritoneum held back by Dr. Parker. Dr. Wood then cut into the bladder and introduced his finger in order to ascertain the position of the stone, and then extracted it from the bas-fond of the bladder with a small pair of calculus forceps. The stone was about the size of a pigeon's egg. At this stage of the operation a portion of small intestine protruded. They were returned without difficulty. The ruptured peritoneum, together with the transversalis fascia, which was loaded with fat, was secured by two silver sutures, and the wound in the bladder by two more. The external wound was closed and the edges held in apposition by two more silver wires, a compress of lint laid over the wound, and a flexible catheter was then introduced into the bladder and held in its position by tapes. Two grains of opium were then administered and ordered to be repeated every hour with brandy $\frac{3}{4}$ ss.

4.30 P.M.—Pulse 104. Complains of cold and a good deal of pain and tenderness over the abdomen. Ordered bottles of hot water to be applied to thighs and sides of the patient.

6 P.M.—Pulse 104. Patient feels rather more comfortable.

7 P.M.—Ordered carb. ammoniac, gr.v., and tr. capsici, gr. xv. every half hour.

8.30 P.M.—Pulse 122, and rallying; skin warm; respirations 24; pupil moderately contracted; tongue moist; thirst; considerable pain; urine passing freely through the catheter.

11 P.M.—Pulse 120; respirations 24; skin warm and moist; tongue coated white; pupil contracted somewhat; a good deal of pain and tenderness; thirst.

April 8th, 4.30 A.M.—Pulse 100; respirations 24; tympanitis well marked; slight pain.

9.30 A.M.—Pulse 133; respirations 36; pupil not so much contracted; considerable tympanitis. Ordered opium gr. ij. every half hour. (The opium taken by the patient up to this time was made into 1 gr. pills instead of 2 grs., owing to a mistake of the apothecary, which is now rectified.)

1 P.M.—Pulse 120; respirations 24; patient is somewhat narcotized; extremities cold.

4.30 P.M.—Pulse 100, and weak; respirations 32; patient is rapidly sinking.

9 P.M.—Patient is unable to swallow his medicines; extremities cold.

April 9th, 3.30 A.M.—Died.

Autopsy eleven hours after death.—Rigor mortis well marked; considerable tympanitis. On opening the abdomen slight evidences of peritonitis were found, and some old adhesions between the small intestine and cæcum. A rupture of the peritoneum was found at its reflexion from off the bladder. Two silver sutures had been passed through the peritoneum, which was found to be united. Another and transverse wound of the peritoneum was found at the point where it is reflected on to the abdominal wall, the small intestines having protruded through the larger opening; the bladder was found firmly contracted; there was no extravasation of urine. The coats of the bladder were very much thickened and softened. The kidneys were very much diseased; the right one containing some cysts. Upon opening the left kidney, which weighed

about fourteen ounces, a large abscess was found in its lower portion communicating with the pelvis, and containing an ounce of pus. Within the cavity of the abscess was found a large calculus of triple phosphate. Several small calculi were also found in other portions of the same kidney. The liver was healthy. A few obsolete tubercles were found at the apex of the left lung. The right lung and heart healthy. The prostate measured about three and a half inches, the middle lobe being much enlarged, about the size of the first joint of the thumb, and ulcerated; two false passages in the membranous and prostatic portion on either side of the stricture.

The high operation has at different periods had its special advocates, and has by them been performed exclusively in a sufficient number of cases to give some valuable statistics. We can refer to the following: Maund lost five in forty operations; Côme, nineteen in one hundred; Cheselden, one in seven; Souberville, eleven in thirty-nine. Mr. Humphrey in a statistical article (*Trans. Provincial Med. and Surg. Assoc.*, vol. 17,) has collected one hundred and four cases, of which thirty-one were fatal, or less than one in three. The following table of the comparative results of the different methods of lithotomy from Dr. Gross's recent excellent work on surgery is very instructive:

Methods.	Cases.	Cures.	Deaths.	Proportion.
Lateral operation,	5418	4824	589	1 in 9 $\frac{1}{2}$
Bilateral method,	207	175	32	1 in 6 $\frac{1}{2}$
Recto-vesical section,	83	67	16	1 in 5 $\frac{1}{4}$
Supra-pubic operation,	180	141	39	1 in 4 $\frac{1}{3}$

The supra-pubic operation has now been performed in this city at least ten times, and with results much less favorable even than are given in the above table. By the courtesy of the several gentlemen who have performed this operation, I am permitted to append to my own case brief notices of their cases.

OPERATIONS BY DR. PARKER.—*Case 1.*—Mrs. L. set. 53, married. The stone was large; operation commenced by injecting the bladder with warm water; incision above the pubes, two and a half inches along the linea alba, cutting down to the bladder; opened the bladder with a pointed bistoury, which was followed by such a regurgitation of fluid through the artificial passage, that the assistant was directed to remove his finger from the urethra, and allow the contents of the bladder to escape; introduced the *bresepierre* of Baron Heurteloupe through the urethra; raised the fundus towards the external opening, until I was able to reach it with the tenaculum; incision not being sufficiently free, was enlarged; the finger being introduced, the forceps were readily carried into the bladder, and the stone removed with great ease; operation terminated by closing the upper portion of wound, and leaving lower part open to admit the free escape of urine, or pus, and thus prevent infiltration; patient recovered very rapidly; stone nearly two inches in length, and one and a half in breadth.

Case 2.—Miss M., set. 53, had a large urinary calculus; made trial of lithotripsy; succeeded in breaking off about one drachm; bladder became inflamed, and in about three weeks proceeded to remove the stone by the high operation; patient was put under chloroform; bladder injected with flaxseed-tea; made an incision along the linea alba, and reached the bladder readily; hooked strongly through it by large tenacula, then punctured the bladder with a pointed bistoury, and made an incision about and a half inch in length; easily removed the stone with nasal polypus forceps; upper part of wound was closed with a suture, the lower being left open for the escape of any discharge; result very satisfactory.

Case 3.—Mrs. E., set. 47, had suffered from stone in the bladder, until she could hardly move about; operated according to the plan laid down in the preceding case, and notwithstanding the amount of disease of the bladder, pa-

tient improved greatly, and three months after was comfortable, but had a slight opening above the pubes, from which pus, at times, escaped.

Case 4.—A. W., æt. 53, Sing-Sing, symptoms stone in the bladder. Patient, a lawyer, with great nervous development; his system had been greatly overworked in the practice of his profession; had difficulty about the urinary organs for some five years; urine containing pus, blood, and triple phosphate; an examination with a sound revealed the presence of a stone in the bladder; calculus appeared to be encysted; it was removed by the high operation, Dec. 17, 1857. Patient rallied from the effects of the operation, but in 36 hrs. began to vomit, sank gradually, and died Dec. 21 (four days after the operation), from violent, and long continued emesis, caused by inflammation and softening of the stomach, as the autopsy showed. The external wound had healed, no urine came through it, but all flowed by drops from a catheter placed in the bladder after the operation.

OPERATION BY E. NOEGGERATH, M. D.—**Case.**—S. B., a healthy child until the age of three, when his parents noticed a change in his generally lively disposition; complained of fatigue in the limbs; wet his bed at night, and even his clothes during the day; several physicians pronounced the disease catarrh in the bladder. When called to the case, child was eight years old, and pitiful to behold; his body reduced to skin and bone, with an expression in his face of long continued and intense suffering. He was constantly wetting his clothes with urine, and supporting his perineum and scrotum with his right hand. This last phenomenon determined me to make an instrumental examination of the bladder, although the skilful physicians who had, in their examination, found no stone, almost satisfied me that there was really no calculus present; after repeated trials, a stone was detected; the high operation was performed in the usual manner, and a very large calculus removed with great difficulty; the boy recovered after suffering from prostatic calculi.

OPERATIONS BY DR. KRACKOWITZER.—**Case 1.**—John Nelson, born of healthy parents, July 10, 1857. While a baby a few weeks old, had varioloid; since then, has been often sick with diarrhoea and bronchitis. About the middle of February, 1859, had symptoms of stone in the bladder; in May, masses, like mortar in consistence and color, passed from the urethra. At that time the parents brought him to the German Dispensary, of the City of New York, (132 Canal street,) to be treated for catarrhal pneumonia. When he got better of that, under the care of Dr. M. Herzog, he was turned over to the surgeons to be examined for stone. Dr. L. A. Voss found the entrance to urethra blocked up by a substance which, after dilatation of the opening of the urethra, had a cylindrical shape, being about half an inch long, forming a cast of the urethra, of whitish color, resembling mortar. An examination made May 16, with the sound, revealed, without difficulty, a stone in the bladder. All symptoms of pneumonia having subsided, the operation was performed May 22, 1860. The sensation imparted to the touch by gently squeezing the stone, could be compared to nothing better than that of a hard-boiled egg. The patient went on the first three days satisfactorily, but pneumonia set in of which he died.

Case 2.—R. C., 18 months old; has suffered from symptoms of stone in the bladder from birth; operation Nov. 19, 1859; closed wound of the bladder with the silver wire sutures; great prostration and vomiting from chloroform; rallied after four hours, but grew weaker in the night, and died ten hours after operation.

Case 3.—D. E. Symptoms of stone three years; operation after same method; Dr. Sims applied the silver suture; did well for six hours, then tenderness and swelling of the abdomen; vomiting; great restlessness; rapid, small pulse; died twenty-three hours after operation.

OPERATION BY HENRY STUART HEWIT, M.D., FORMERLY OF THE U. S. ARMY.—**Case.**—E. S., aged 19; all the rational signs of stone in the bladder; after mature deliberation, determined to select the high operation; ordinary abdominal section was made; the viscus raised upon the point of the retained catheter was secured by a stout suture passed through its coats; the stone was extracted with the utmost ease; the incision in the bladder was immediately closed by four points of interrupted silk suture, inserted with the aid of a sharp artery-needle; patient made a rapid recovery.

Reports of Hospitals.

NEW YORK HOSPITAL.

AMPUTATION OF LOWER THIRD OF FOREARM, ACUPRESSURE.

[Reported by ROBERT F. WEIL, M.D., Resident Surgeon.]

THE patient on whom Simpson's method of controlling hemorrhage by acupressure, was first practised in the New York Hospital, was a healthy young man, aged 23 years, who had received a short time prior to his admission (March 16th, 1860,) a severe compound fracture of the left metacarpus with considerable laceration of the soft parts, which had been produced by his becoming caught in some machinery. An attempt was made to save the ulnar portion of the hand, where was the least amount of injury, but this, however, failed, the fingers sphacelating. The wound was then left to digest, and attention was directed towards improving his general condition in reference to a secondary amputation, which was performed, April 26th, by Dr. Van Buren, at the junction of the lower and middle thirds of the forearm; the tissues of which were much thickened and oedematous. The method of anterior and posterior flaps of integument with circular division of muscles, etc., by successive incisions, was adopted; the tendons also were drawn out of their sheaths to a moderate extent, and cut off to prevent interference with primary union, in the manner advised by Mr. H. Crookery in *Med. Times and Gazette*, vol. i., 1860, p. 86. Three common Berlin wire wove pins, about two and a half inches in length, and similar to shawl pins, were used; one each, for the radial, ulnar, and interosseous arteries, the latter being secured by a needle passed directly through the interosseous space, but not appearing in the face of the stump, and compressing the vessel against the outer border of the radius; the other arteries being secured. The extremities of each needle being in the cutaneous surface of the palmar flap as the stem of a flower is fastened to the lapel of a coat. No ligatures were applied, and the stump was closed by seven silver wire sutures; some slight oozing occurred the same evening from the outer angle of the wound but ceased spontaneously. Forty-eight hours after the operation, but moderate swelling having ensued, the needles were carefully withdrawn, and on the eighth day the sutures were also removed; union by first intention having taken place throughout the deeper portions of the stump, and but a slight linear ulceration being visible at its periphery. This speedily cicatrized, and the patient was discharged from the hospital May 19th.

INCISED WOUND OF WRIST—RADIAL AND ULNAR ARTERIES SEVERED.

[Reported by T. B. WARD, M.D., Acting Resident Surgeon.]

I. S., ætat. 37, was admitted April 2d, having received among other injuries in a fight, an incised transverse wound of the left wrist, dividing the radial and ulnar arteries. When first seen by the surgeon he was suffering from the effects of the hemorrhage, which, according to all accounts, was quite profuse immediately after the injury was inflicted. The wound was cleared of clots, both vessels were secured at their proximal and distal extremities, and the lips brought

together loosely in order to court union by second intention, and the whole supported by a dorsal splint on the forearm.

The process of cure was a very tedious one, the granulations for a long time were pale and indolent. This circumstance was no doubt owing to the anæmic condition of the patient, but more particularly to the imperfect establishment of the collateral circulation of the parts.

PENETRATING WOUND OF CHEST.

James Fleming, æt 23, New York, was admitted April 29th, at five o'clock A.M., having received his wound in a bar-room scuffle, the instrument used being an oyster knife. The wound is three-quarters of an inch in length, and situated two inches to left of median line of sternum. The first rib is entirely divided across three-fourths of an inch from its sternal articulation. The lung is evidently penetrated, from the fact that air issues freely from the wound. Slight oozing of venous blood at time of admission. Patient is much prostrated, no pulse at wrist, surface very cold, jactitation of limbs, anxious countenance, &c.

Treatment.—The heater was applied, reaction was established, and afterwards opiates were administered, but at the end of the second day after, the patient was seized with the symptoms of pleurisy, which terminated in death the following day.

Autopsy.—Eighteen hours after death the catheter was introduced into the wound and penetrated to a depth of three inches in the substance of the lung. The pleural cavity was found to contain three and a half pints of serum mixed with blood. The left lung entirely collapsed, and wound found two and a half inches below apex. Strong adhesions around wound; other organs healthy.

BELLEVUE HOSPITAL.

MALPOSITION OF FÆTUS DETECTED BY EXTERNAL MANIPULATION DURING LABOR.—CEPHALIC VERSION BY THE SAME MEANS, —SUCCESSFUL.

The following interesting and highly practical questions in obstetrical science, have recently been agitated among those devoted to that branch of medicine. 1. Can a mal-position of the fœtus in utero be detected by external manipulation prior to labor? and, 2. Can such mal-position be rectified prior to labor by external manipulation? Some of the leading professors of obstetrics in this country have taken strong grounds in the negative, and several not only denying the possibility of detecting and correcting mal-positions prior to labor, but even questioning the professional honesty of the practitioner who should endeavor to determine by external examination, prior to labor, whether a mal-position existed. The following case, which occurred in Bellevue Hospital, a few days since, under the care of Dr. Barker, is a most important contribution to this subject. We copy the notes of the case, furnished us by Dr. E. B. Barrett, House Physician:

Mary Ann —, æt. 17, born in Ireland, was admitted to the Waiting wards of the Bellevue Hospital March 19th, 1860, in her first pregnancy. On examination, the uterine tumor was very conical, projecting markedly to the right, as well as forwards, triangular in shape, with its transverse diameter greatest. The os uteri was dilated to the size of a quarter of a dollar, and dilatable. The membranes were very full, and projected strongly from the os, and so tense were they that no part of the child could be felt from danger of rupturing them. On the following morning, as the pains had somewhat exhausted the patient from their teasing character, and as little or no progress was being made, an opiate was administered, from which the patient was enabled to obtain some sleep, awaking much refreshed at 12 M. (the 4th.) The pains now increased in force and frequency, but with no result, save the further dilatation of the

os, which was now between two and three inches in diameter. On vaginal examination no part of the child could be felt without rupturing the membranes; by palpation the previous conjecture, viz. that a transverse presentation existed, was rendered nearly certain.

Dr. Barker came to pay his daily visit at this juncture, and concurring in the opinion that the child presented transversely, decided on immediate interference. Accordingly the patient was brought under the influence of chloroform. Dr. Barker again examined the tumor more carefully, both by palpation and "per vaginam." Through the external walls the head could be felt in the left iliac fossa, above the pubis. The pelvic extremity of the fœtus was in the right iliac fossa, and the curve of the dorsum could be traced strongly projecting forwards. By a vaginal examination the os was found dilated to the diameter of about three inches, soft and dilatable, with a very large and projecting bag of waters. The presenting part of the fœtus could not easily be felt through the bag of waters, and no force was used for fear of rupturing the membranes; but the deduction, from the external and vaginal examination, was, that the right shoulder was the presenting part at the superior strait. Dr. Barker therefore decided to attempt cephalic version, in preference to the ordinary method, and he at once proceeded to operate, in the presence of several members of the medical staff of the hospital. The patient being brought to the edge of the bed, in the approved position, he first manipulated by attempting to elevate the pelvis of the fœtus with his left hand, and to depress the head with the right, acting only when it was found that the uterus was not contracting. Finding that he had essentially changed the position of the fœtus, the right hand of an assistant was placed to make strong pressure over the left iliac fossa; he (Dr. B.) still elevating the pelvis of the fœtus with his left, introduced into the vagina two fingers of the right, and during the time of uterine contraction ruptured the membranes, when the waters escaped with great force and abundance. The head could now be felt in the superior strait in the *left occipito iliac* position. The administration of chloroform was now discontinued, in the hope that the uterus would complete the delivery unassisted. Slight pains, with little progress, followed for fifteen minutes, and as the foetal heart was beating somewhat feebly, it was deemed necessary to apply the forceps. The forceps being applied, a male child, weighing eight pounds, was extracted in a partially asphyxiated condition. Respiration was established in a short time, however, and it is now a perfectly healthy child. The placenta came away in five minutes, with no more than the usual amount of hemorrhage; the perineum was not lacerated, and the patient but little more prostrated than is usual after natural labor. The patient proceeded to a rapid convalescence, with no unfavorable symptom, notwithstanding the prevalence of an epidemic of puerperal fever in the Hospital at the time of her confinement.

In his clinical remarks upon the case, Dr. Barker contended that he had demonstrated beyond cavil—1. That a mal-position of the fœtus in utero can be detected by external manipulation during labor. Auscultation furnished but slight assistance, and the results of an internal examination were entirely negative. The important fact, however, worthy of special notice is, that the position of the fœtus could only be determined when the uterus was in a quiescent state. It follows, therefore, if the most favorable time for detecting the position of the fœtus is in the interval between contractions, that a mal-position can be made out by external manipulation prior to labor; and if the position can be discovered in the interval of the pains of labor, it can also be done one, or two, or even many days before labor. 2. This case demonstrates the possibility of performing version by external manipulation during labor, and, as version by the hand introduced into the uterus was attempted in the absence of pain, he thought this case equally proved that version by external manipulation is possible before labor. But to have the fœtus remain in its

new position it would be necessary to rupture the membranes and induce labor, in order to secure the engagement of the head in the pelvic cavity.

NURSERY AND CHILD'S HOSPITAL.

TWO CASES OF PLEURO-PNEUMONIA WITH PULMONARY ABSCESSSES WITHOUT CORRESPONDING SYMPTOMS.

[Under the care of GEO. A. PETERS, M.D.]

Case 1. J. M.— was admitted May 19th, 1859, at the age of two months. He was very delicate at the time of admission, and had slight bronchitis; in the hands of a wet-nurse he began to improve, and continued to do so till the middle of July, when several attacks of diarrhoea occurred at intervals of three or four days; each lasting not more than twenty-four to thirty-six hours; from the occurrence of these he began to decline, boils made their appearance upon the back part of his head and neck, and there was considerable constitutional disturbance; he was treated with tonics, vegetable and ferruginous, but they were of no sensible benefit, either as regards the eruption or the general condition of the child.

Aug. 1st. Continues to fail, with no apparent cause, except the furuncular eruption and the attacks of diarrhoea.

Aug. 5th. Died suddenly to-day of asphyxia, although he had had no symptom to direct attention to the chest.

Autopsy—eight hours after death.—Great emaciation; rigor-mortis; on opening the chest, the right lung was found collapsed, occupying a very small space; it could not be inflated, except in a few places in the lower lobe, which appeared to be pneumonic, having the solid feel belonging to this disease; from one to two ounces of turbid serum, were found in the pleural cavity; both the parietal and pulmonary pleurae were pretty well covered with a fibrinous deposit of a creamy appearance. Some of this had settled in the depending portion of the cavity. On the left side the lung also occupied a very small space, almost entirely collapsed; the upper lobe could be readily inflated, when it had the cushiony feel of the healthy lung; the lower lobe had a healthy appearance, and could be inflated, except a portion in the posterior aspect; measuring perhaps, an inch in diameter; this portion was partially coated with lymph, and was found to contain two small abscesses, one closed, the other opening externally on the surface of the lung, and internally into the bronchial tube. As the air passed directly through this opening, it was impossible to ascertain whether this part of the lobe could be inflated; the closed abscess contained from one-third to half a dram of disintegrated lung tissue and pus-corpuscles as shown by the microscope; foramen ovale open; weight of liver, $\frac{3}{4}$ vjss. Stomach and jejunum healthy; the mucous membrane lining the lower part of the ileum and the whole extent of the colon was vascular, and that of the latter considerably thickened, but no ulceration was noticed; mesenteric glands enlarged and of a lighter color than in the healthy state.

Case 2. M. J.— was admitted into the hospital, Oct. 7th, 1859, at the age of about four months. At the time of admission she was delicate and suffering from diarrhoea, which was relieved by castor oil mixture. After this she continued to improve until the latter part of October, when her abdomen became distended and tympanitic, and she appeared to suffer much pain. This condition was relieved by aromatic drinks and warm applications, but it continued to return at intervals. Pains were taken to nourish and sustain her, and hopes were entertained of her ultimate recovery.

On the second of November, however, at 10 P. M., she was suddenly seized with violent dyspnoea, which terminated fatally in about a quarter of an hour. Previously to the dyspnoea no cough had been noticed, or other symptom referable to the chest.

Autopsy—thirty-eight hours after death.—Body considerably emaciated; slight rigor mortis; on opening the thorax, the left lung was found healthy with the exception of slight hypostatic congestion; the right lung was adherent to the diaphragm, and to a considerable part of the costal pleura by fibrinous exudation; the whole lung appeared somewhat compressed and was non-crepitant; the upper lobe floated in water; the middle and lower sank and could not be inflated or but slightly; this portion of the lung contained a few small abscesses filled with purulent matter, each holding scarcely more than a drop; one or two of these appeared to have opened into the pleural cavity, as the air passed through them in attempting to inflate, but possibly they may have been opened in separating the adhesions; in one of the closed abscesses both pus and exudation corpuscles were found with the microscope; the lung surrounding the abscess contained both kinds of epithelial cells, pus, and exudation corpuscles; two or three ounces of fluid were found in the pleural cavity, consisting mainly of fibrinous flocculi, pavement epithelial cells from the pleura, pus, and exudation corpuscles; the lower portion of this fluid, on standing, contained so much pus as to become gelatinous on the addition of acetic acid; heart normal; liver congested and weighing $\frac{3}{4}$ ix.; mesenteric glands enlarged; kidneys, stomach and small intestines apparently healthy, but the latter distended with gas; the colon showed considerable vascularity in its descending portion, and near the ileo-cæcal valves, but no ulceration was observed.

BROOKLYN CITY HOSPITAL.

CASES ILLUSTRATING A NEW AND SUCCESSFUL TREATMENT OF VARICOSE VEINS BY THE INJECTION OF PERSULPHATE OF IRON.

[By JAMES M. MINOR, M.D., Attending Surgeon.]

The following cases possess the double interest of novelty and practical utility.

There are none of a similar character on record, except those in which this treatment was adopted subsequently to, and in imitation of, them.

It will be observed that I have introduced a case of *aneurism*, treated with injections of the perchloride of iron, among cases of *varicose veins*, treated with the *persulphate*.

In doing so I have violated the harmony of pathological relation, in order to illustrate the efficiency and innocuousness of the preparations of iron. The first case was in private practice, the others were treated in Hospital.

CASE 1.—Popliteal Aneurism cured by the Injection of the Perchloride of Iron.—On the 9th of November, 1857, I was requested by Dr. Jas. Crane to see Mrs. T. I found a small, pulsating, superficial, aneurismal sac, between the right labium and thigh, about the diameter of a Madeira nut, and projecting about half an inch above the surface. From it projected a small nipple-like or rather tubular off-shoot, from which, previous to its ligation by Dr. Crane, arterial blood spouted *per saltum*. Mrs. T.'s account of it was, that about seventeen years previously she had received a severe blow at that point while entering a stage-coach, from the heavy iron hook attached to one end of the "back strap" of the middle seat, causing very severe pain at the time, but of short duration. Is not absolutely sure how long she has felt pulsation, but thinks that about a year since it became very distinct, and assumed the purplish tinge it now has; pulsation was more active at every menstrual period. A careful examination, by alternate pressure upon the femoral, and at a point posterior to the sac, shows a supply trunk, probably from some one of the perforating branches of the profunda femoris in front, and the obturator behind.

Upon consultation between Drs. Crane, Isaacs, and myself, and at Dr. Isaacs' suggestion it was determined to use injections of powerful styptics. This course was adopted in

view of the manifold difficulties in the way of an effort to tie the supply trunks.

There were four several attempts made, at intervals of about a week, with solutions of lactate, muriated tincture, and perchloride of iron, using at the same time Signoroni's tourniquet to control the circulation through the femoral artery, and lessen the tendency to wash away the newly-formed clot. It was impossible to exert much force in controlling the current from the obturator artery, as the finger alone could be used.

The solution of the perchloride alone sufficed, with the aid of the tourniquet, and the recumbent posture, to effectually coagulate the blood and block up the sac. The pain caused by the perchloride was very severe, and continued for more than twelve hours, and was followed by considerable inflammatory action. It was completely successful, and Mrs. T. recovered with entire obliteration of the sac. The tourniquet was kept on for some days, being loosened at intervals, to lessen the intolerable pain caused by the pressure. The filling by granulation of the cavity left where the coagulum came away (which it did by ulceration) occupied some weeks.

The notes of this case having been lost, will account for the omission of some points of interest. They have been drawn out from memory, and by the aid of the patient.

The following cases of varicose veins, treated by the injection of persulphate of iron, occurred in the Brooklyn City Hospital, the notes of which are furnished me by R. P. Moore, M.D., House-Surgeon:

CASE 2.—Varicose Veins of Leg—Injection of Persulphate of Iron—Cured.—John Towle, admitted March 1st, 1859 (Dr. Enos on duty), with ulcer from varicose vein on leg, of five years' duration; it has healed repeatedly, but again re-opened. Ordered poultice, and rest in recumbent posture. April 25th.—Ulcers nearly healed. Injected liquor ferri persulphat. gtt. x.* May 2d.—Veins obliterated at point of injection; neighboring branches still varicose. May 20th.—Ulcers entirely healed, and patient permitted to go out on a pass. Returned drunk, with abrasion of newly cicatrized surface. June 13th.—Discharged cured.

CASE 3.—Varicose Veins of Scrotum—Injection of Persulphate of Iron—Cured.—J. T., æt. 22, American, admitted under Dr. Minor Oct. 24th, 1859, with varicose condition of scrotal veins of left side. Has enjoyed very good general health. For six months past has suffered much pain from distended veins of scrotum, extending through spermatic cord to inguinal canal of that side, and also in the testicle; can obtain no relief except in recumbent posture. Ordered cathartic. Suffers with languor and debility from involuntary seminal emissions, after which the pain is much aggravated. Oct. 28th.—Injected four drops of a solution of persulphate of iron (four parts of water to one of persulphate), with Pravaz's syringe, as modified by Tiemann. Patient was made to stand erect, in order to fill the veins, and make them more distinct and prominent—a necessary precaution in such loose tissues as are found in that region. He fainted, but was soon restored by placing him in a recumbent posture. The operation scarcely caused any pain, either at the time or subsequently. A firm coagulum was formed in thirty seconds. Ordered cloths dipped in water to the part, and recumbent posture. Nov. 3d.—The clot formed by persulph. ferri gives indications of coming away by ulceration. Has felt less pain in cord since operation; nor does he feel any pain at the point of puncture. Feb. 6th.—Clot came away last night, leaving a healthy granulating surface. 26th.—Discharged cured.

CASE 4.—Varicose Veins of Scrotum—Second Injection—Cured.—James Taylor was admitted a short time after his discharge in November last, with varicose condition of other deep scrotal veins near the cord. The vermiform mass of enlarged veins around the point of former operation are entirely obliterated. Has been variously treated since second admission, but without resort to operative measures.

Feb. 14th.—Veins increasing in size, attended with pain. Injected three drops of a solution of persulphate of iron in the proportion of one part persulphate to two of distilled water, followed by immediate coagulation of blood, as on former occasion, and with as little pain. 15th.—Injection seems to have entirely relieved the pain in the cord, and he expresses himself as feeling better in every particular. 19th.—Continues comfortable. Some pain and heat at point of puncture, where there is an exceedingly hard and prominent tumor. Tumor is close to the cord, and seems in some measure to involve it. Seminal emissions occur at long intervals now. Cold water dressings. 26th.—Clot decreasing in size, but still very hard. No appearance of ulcerating, as on former use of the persulphate. March 1st.—Tumor has steadily decreased in size; but little hardness remains. Veins completely obliterated when injected, as well as all others which were enlarged.

CASE 5.—Varicose Veins of Leg—Injection of Persulphate of Iron—Cured.—Carl de Buke, admitted Dec. 22d, 1859, with paronychia of left thumb. Varicose veins in left leg, which he has had for many years. Veins very much distended at one point. Owing to the size of the veins it was thought necessary to insert a larger quantity of the solution than usual. Feb. 11th.—Ten drops of a solution of the strength of one part persulphate to three of water was used. 12th.—A clot has formed, and obstructed the vein; though it does not appear to be so firm as in previous cases. 14th.—Complains of pain at point of puncture, where there is a considerable swelling and redness. Apply cold lotion. 16th.—Inflammation and pain subsiding. Continue lotion. No constitutional disturbance at any time. 22d.—Tumor lessening in size, and redness disappearing. March 10th.—All inflammatory symptoms have subsided, and the vein is obliterated at point of operation.

CASE 6.—Varicose Veins of Leg—Injection of Persulphate of Iron—Cured.—James Flemming was admitted December 29th, 1859, with secondary syphilis, and ulcers on right leg: has varicose veins of the same leg, which are increasing in size, and he expresses a wish to be operated on for their relief. Feb. 11th.—Injected as usual, three drops of a solution of the persulphate of iron, one part to four of water. A second puncture was made below the first. 13th.—Coagulum formed, but not so marked as in other cases. No inflammation about punctures. 19th.—Ulcer on leg has improved rapidly since operation. 25th.—Vein obliterated between points of operation. 27th.—Old ulcer cicatrized, and he desires to leave the hospital.—Discharged cured.

It may be desirable to state briefly, the mode of procedure in the injection of varicose veins. A Pravaz's syringe as modified by Mr. Tiemann is the instrument used. This is a very small syringe of vulcanized rubber having a small (almost capillary) canula screwed to its lower end. This canula is cut obliquely at its extremity somewhat after the manner of a pen, ending in a sharp point. The piston rod is graduated to drops, to admit of the use of any quantity however small.

The canula being screwed on, the quantity of the solution desired to be used is drawn in through the canula, which is then plunged into the vein, the patient standing erect. The finger of an assistant is then placed upon the vein, a little above and below the point of puncture, and firm pressure made; the piston is then forced down and the fluid injected. It is important that the pressure on the cardiac side of the puncture, should be sufficient to completely stop the upward current, as otherwise portions of the clot might be carried into the circulation. The pressure need be kept up for a minute or two only.

This completes the operation. The patient is placed in the recumbent posture, and cold water dressings applied, with directions not to rise for some days. The above mode of treatment of varicose veins, would seem to promise a safe, prompt, and painless cure of a most uncomfortable, painful, and sometimes perilous complaint, for which, heretofore, there have been only uncertain and dangerous expedients.

* Official solution contains 48 per cent. of the solid persulphate.

The persulphate of iron, as far as heretofore used, seems to excite adhesive inflammation alone, thus avoiding that formidable affection pyæmia; and I feel confident in recommending it to the profession, as a safe, simple, and almost certain remedy for varicose veins, and with some qualifications, for *small* aneurisms.

ST. LUKE'S HOSPITAL.

TWO CASES OF MORBUS COXARIUS SUCCESSFULLY TREATED BY AN APPARATUS MAKING EXTENSION AND COUNTER-EXTENSION.

[Reported by EDWARD B. DALTON, M.D., Resident Physician.]

Two boys, one 4, the other 5 years of age, entered the hospital, the one on the 12th of January, and the other on the 2d of February last, both suffering from morbus coxarius.

The symptoms exhibited in these two cases were so nearly identical, and the treatment and progress thus far has been so uniform that they may readily be described together. The only striking difference in the symptoms was, that in the case of the youngest the general health was much more seriously impaired than in the other. In one the right hip, and in the other the left, was the seat of disease. In neither case had there ever been any abscess, or ulcer over the joint. In each there was tenderness, heat, and swelling in that situation, and intense pain was caused by the slightest movement of the limb. Under the direction of Dr. George A. Peters, the attending surgeon, the patients were put upon the use of constitutional tonics, and a few days subsequent to their admission, Dr. Henry G. Davis, of this city, applied his apparatus for the cure of this disease. The treatment by this apparatus consists in first extending the limb for several weeks, more or less, until its length equals that of its fellow, or as nearly so as practicable, and then retaining the limb in position by means of a splint, which, while it keeps up extension, allows the patient to enjoy the advantages of exercise and fresh air. To accomplish the first end, a broad strip of adhesive plaster is applied both to the outer and the inner aspect of the affected limb throughout its entire length, and over these again a third strip is carried spirally round the limb from the hip to the ankle. A bandage is then applied from the toes up, leaving exposed and free the lower extremities of the side straps, to which are attached bands of webbing made to buckle in a loop beneath the foot. To this loop is attached a cord traversing a pulley at the foot of the bed, and sustaining a weight. In each of these cases a weight of three pounds was first used, increased after a week to four pounds. A few days after the application of this apparatus, the relief experienced by the patients was very apparent. The pain in the joint, as well as that produced by motion, began at once to diminish. This was strikingly evident from the fact that the patients' sleep, which had before been incessantly broken by their own involuntary movements, became much more quiet. Their general health, too, rapidly improved. This amendment became daily more marked, until after some four or five weeks all suffering had ceased. The general health of both patients was excellent, and a very considerable motion of the affected joints caused no complaint. Within a few weeks subsequent to the commencement of this treatment, the splint was frequently substituted temporarily for the cord and weight. This splint consists of a narrow bar or band of steel, adapted to the form of the outside of the thigh and leg, and having a hinge-joint near its middle, capable of being made immovable. The counter-extension is accomplished by means of a perineal band of India-rubber, fastened at either end to a cord of cat-gut which traverses a small ring at the upper extremity of the splint. The splint itself terminates just above the external malleolus, where it is kept in place by the band of webbing attached to the outer adhesive strap, which is carried up over the end of

the splint and fastened by a buckle attached to the shaft of the latter some four inches above.

The splint is applied with its upper and lower portions forming an angle at the hinge, and extension is produced by obliterating this angle, and thus bringing the splint throughout its entire length into contact with the bandaged limb. The movements of the hip-joint are not interfered with. The application of the splint is the work of only a few moments, and gives rise to no pain or inconvenience. In these two cases it has now been worn daily for several weeks, and only removed at bed-time, to be immediately replaced by the weight. In both instances the limbs are kept constantly at their natural length, and can be moved with great freedom without causing any pain. The tenderness, heat, and swelling over the joints have long since subsided, and the patients are both in the enjoyment of fine health. The light and compact character of the splint enables them to be dressed, and to have their regular exercise, and to be out-of-doors whenever advisable.

LONG ISLAND COLLEGE HOSPITAL.

CASES OF PARALYSIS CONNECTED WITH DENTITION; WITH REMARKS BY PROF. F. H. HAMILTON.

[Reported by JOHN G. JOHNSON, M.D.]

There have been recently presented to the class six cases of paralysis connected with dentition.

Case 1.—A little girl nineteen months of age, in whose case the left arm is paralysed. There is wasting of the deltoid and of the muscles of the arm and forearm—with complete loss of power. The paralysis is of three months standing.

Case 2.—A girl of three years of age—paralysis of the left leg. The heel is raised considerably from the ground. The muscles of the leg are more wasted than those of the thigh. In attempting to walk, she drags the foot sideways.

Case 3.—Mary Gorham, two years and one month old. Eight months ago she had a fever, after this the mother noticed that the child could not use the left leg. There is a tendency of the foot to rotate outward, she drags the toe. Paralysis is mostly from the knee downwards. There is wasting of the limb. In this case it is to be attributed to the fever. Prof. Hamilton has never seen a case in which infantile paralysis could be attributed to the abuse or use of calomel.

Case 4.—Boy three years and a half old, in all respects healthy, except loss of power of left leg. No traceable cause, unless diarrhoea attending teething. The limb is wasted and heel is elevated, there is dragging of the toe—sensation in the limb is perfect.

Cases 5 and 6.—Were both boys, and the paralysis confined to the right leg—presenting the same symptoms of wasting of the limb, loss of power, elevated heel, &c.; no assignable cause for the paralysis.

Remarks.—Infantile paralysis occurs generally at some time during the period of first teething, and seems to have a more or less direct connection with this process. There are several periods in life, in which the system or portions of the system undergo remarkable changes, and great nervous derangements are apt to ensue. The period of the first dentition, is one of these, and among the consequences of the nervous disturbances occasioned by the development of the teeth are convulsions, hydrocephalus, diarrhoea, and *paralysis*. The other periods to which I allude, are puberty in both male and female, and "the change of life," or the period of cessation of the menses in the female. I think that I have observed, also, that at the period of "change of life" in the male, paralysis and cerebral apoplexy are exceedingly liable to occur.

Infantile paralysis is more common in the legs than in the arms; yet we see it occasionally in the arms. It generally

exists but in one leg, occurring in most cases suddenly, and not unfrequently after a diarrhoea or fever of some form, or after exposure to the cold. Its frequent sequence to some temporary illness has often led parents to suppose that it was due to the medicine which had been given, especially to mercury; but I have never been able to trace it to the use of mercury, in any form. I have never seen the paralysis complete; it being, in the case of the lower extremities, confined mostly to that portion of the limb which is below the knee, and existing much more in the nerves of motion than in those of sensation.

The child can generally stand upon, and even walk with the limb tolerably well; but the foot turns out whenever the weight of the body rests upon it, and the gait is unsteady and insecure. He is especially unable, when sitting, to raise and extend the leg upon the thigh, but he can generally flex the thigh upon the body without difficulty. After a time the muscles become sensibly diminished in size, especially the muscles of the leg; and if the paralysis continues, the leg does not increase in length quite as rapidly as the other, and the foot becomes more and more turned out at the ankle.

Treatment.—First of all, if the case is seen soon after the occurrence, the bowels should be well evacuated, and the condition of the gums should be looked to. The child should then be turned out of doors, and be permitted to gather health and strength by exercise in the open air. By use, mainly, are these muscles to be again restored to action. The little patient should therefore be encouraged to walk, and if old enough he must be directed to sit occasionally upon a chair and swing his leg back and forward in flexion and extension. No apparatus ought to be employed to support the ankle or the knee, unless these joints are becoming greatly deflected, or the limb is totally unable to support its weight. When apparatus is substituted for the muscles, the muscles being thrown into disuse, are not in a condition to gain strength. Upon this point there is a popular error which needs to be corrected. When a young man begins to stoop, or his spine begins to fall to one side or the other, his friends tell him he must get a shoulder-brace or a spine-supporter—and there are always plenty of them hanging in the windows of drug-shops, patented and recommended for this very purpose. Now the probability is, that this fall of the shoulders or curvature of the spine, is entirely due to muscular weakness. The great trapezoid does not pull the scapula well back, and if we pull them back with a shoulder-brace, leaving the muscles nothing to do, they will rapidly become atrophied, and when the brace is taken off the shoulders, will fall forward more than ever. It would be much better to put the brace in front, and tie the shoulders forward, and then by the constant antagonism the trapezoid would be strengthened. Those persons who carry weights upon their heads, grow straight; the spine being made to erect itself by the action of the muscles, whose power is thus developed and perfected. It is this use of the muscles in carrying the gun, which makes the soldier and the hunter so erect. The same principle applies to these cases of infantile paralysis. The limb should be kept in constant use, and no apparatus should be employed to support the limb, except in the few extreme cases mentioned. It is well, also, to bathe the limbs in cold water once a day, and to rub them freely afterwards. Galvanism and electricity also deserve a trial.

Usually the recovery is very slow, extending through a period of several years; but I have been enabled to follow the history of enough of these cases to warrant me in assuring the parents that they will almost certainly improve, and that there is a reasonable probability of a final and complete recovery.

CHANGE OF STATION.—Assistant Surgeon John F. Hammond has been ordered to relieve Assistant Surgeon John Campbell at West Point.

TERMS OF THE AMERICAN MEDICAL TIMES.

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American Medical Times.

SATURDAY, JULY 7, 1866.

THE AMERICAN MEDICAL TIMES, the first number of which we now present to the profession, will give to most of our readers the first intimation which they have received, that important changes have taken place in the NEW YORK JOURNAL OF MEDICINE. As no preliminary announcement has been made, some may be led to believe that these improvements have not been long contemplated, and have therefore been completed without due reflection and preparation. We deem it but an act of justice to them, and equally so to ourselves, to state briefly the reasons which have led to these changes.

With the issue of the last number, THE NEW YORK JOURNAL OF MEDICINE completed the seventeenth year of its publication, having been established in July, 1843. It was originally projected by SAMUEL FORRY, M.D., who during his brief career in this city won, by his profoundly scientific essays, an enviable fame, and by his gentleness and urbanity, an abiding place in the hearts of his professional brethren. In his prospectus Dr. FORRY says:—"The leading objects sought in the establishment of this Journal are, to elevate the character and dignity of the American Medical Profession generally, and especially to afford a medium, free from all individual interests and party, through which the rich results of the experience of the profession in this city, much of which is now lost, may be communicated." That these praiseworthy objects have been wholly realized, the history of that periodical fully attests. Under the judicious editorial management of PROF. CHARLES A. LEE, and S. S. PURPLE, M.D., it acquired during the first ten years of its publication, the entire confidence of the profession, and a circulation second to no other similar periodical in this country. Since that period it has pursued the even tenor of its way, maintaining its position as a high-toned scientific journal; and never deviating from the strictest rules of professional decorum and courtesy. In no instance have its pages been sullied with the personal reflections or improper insinuations and allusions which are liable to enter the discussions of authors who are advocating favorite theories. As a medium for the communication of scientific intelligence, it has always been a free, independent journal, subject to no individual or party interests of any kind whatever. And that it has proved an acceptable organ of the profes-

sion, the thirty-four volumes now completed, filled with elaborately written monographs and papers abundantly prove.

But well as that periodical has served its day and generation, and eminently as it has realized the great idea of its founder, the important question has recently occurred to the minds of many of its friends; is it to-day subserving in the highest degree the best interests of the profession? During the period of its existence, what marvellous changes have taken place in the social condition of our people! How rapid has been their advancement in population, in the aggrandizement of wealth and power, and in all the arts of a higher civilization! Within the last seventeen years, a complete revolution has occurred in nearly every department of industry. Science has demonstrated and art developed in multifarious methods, the truest aids to human progress. Every department of industrial enterprise has been metamorphosed by the applied sciences. The means and methods, the instruments and appliances of that period, are now discarded or treated with ridicule and contempt. But it is not to any occult causes, that we are to attribute this remarkable stimulus of the human intellect, which has so marvellously revolutionized society; the application of steam to travel, and electricity to the communication of intelligence, have been the most efficient agencies in effecting this result. They have so compacted society however widely scattered, and centralized commerce, science, and letters, that the people of every part of our widely extended republic, with all their diversity of interests, are brought in their thoughts and sympathies within the circle of a single community. With these improvements in man's social condition, commerce and every branch of industry keep pace and shrewdly seize the golden opportunities as they occur, to enlarge the domain of their operations. With these increased facilities for inter-communication comes a demand upon the press for the more frequent and rapid diffusion of intelligence; monthlies have changed to weeklies, weeklies to dailies, and dailies must have almost hourly editions.

Scientific medicine now partakes largely of that spirit of inquiry and restless activity which characterizes the age. In every department ardent and impulsive adventurers, with all the aids of modern invention, are enlarging the bounds of knowledge, and daily unfolding truths and principles of the greatest practical utility. These developments in the medical sciences are not now made at long intervals, but they are daily and almost hourly occurrences. He who maintains a familiar acquaintance with latest improvements, even in a single department of medicine, must in our times be a student of unremitting application. And not only is there an active spirit of inquiry and research in enlarging and more thoroughly exploring the domain of medical science; but our hospitals, the great repositories of accurate observation, and our schools, where these facts are reduced to systems and made available, are heartily co-operating in the great work of medical education, and the diffusion of practical knowledge. This rapid development of every branch of medicine, and the increasing desire on the part of the profession at large, for the earlier and more frequent dissemination of scientific intelligence, imperatively demands the co-operation of the metropolitan medical press.

These are some of the considerations which have led to the conclusion that this journal, by a change of form and more frequent issue, might be made far more conducive

to the interests of the profession, both of the city and country, than it is at present. However well it may have been adapted to the period of its first publication, it cannot to-day in its present form faithfully represent New York, with her population increased three-fold, her numerous and well appointed hospitals, her flourishing schools of medicine, and her gradual centralization of medical interests. With a full knowledge of our increased responsibilities and labors, we have, with the sole object of rendering this Journal in the highest degree useful to the profession, determined to exchange bi-monthly for weekly medical journalism. We are aware that other laborers have preceded us in this field, fruitful at least in harassing cares and constant toil, and we desire to be co-workers with them in the development of its resources.

In entering upon the duties of weekly medical journalism a word of explanation in regard to its spirit and mission, and the special duties and obligations which we feel are imposed upon us, is due to the professional public.

It is designed that the pages of this journal shall furnish a faithful and timely record of scientific progress and practical improvements in the healing art. In every department of medical science and professional literature, in the several branches of special pathology, practice, surgery, hygiene, and medical polity, distinguished contributors have already been secured, and we cordially invite the coöperation of others in all sections of our country. Original observations and researches, scientific and practical reports, condensed *résumés*, properly reported cases, and individual facts, will be gratefully received, and properly acknowledged. It is desired that these pages shall furnish an acceptable and popular medium for the individual and united utterances of medical men on all subjects connected with the progress and interests of medical science, the most advanced views in sound medical philosophy, and the defence or the criticism of both the old and the new, as well as the proper discussion of questions relating to the common interests, obligations, and wants of our sacred profession.

In connection with the department of Hygiene and State Medicine, it is designed to discuss practical questions and record the evidences of scientific progress in those important applications of our art, and we hope, also, to keep up an Epidemiological Record, that shall embrace a reliable history of epidemic and endemic maladies throughout our country and the world. In order to accomplish this important purpose, we cordially invite the attention and correspondence of all competent observers of epidemic or of epizootic diseases.

The very liberal arrangements which have been made by the publishers, for securing full reports from all the hospitals, and the various medical institutions and associations in the cities of New York and Brooklyn, cannot fail to give the highest practical value to the journal, and will tend strongly to promote the interests and multiply the good works of those several sources of medical intelligence, for

"A chiel's amang you taking notes,
And, faith, he'll prent it!"

While this Journal designs to present to the profession an accurate, full, and impartial record of medical progress and practice, as set forth in the foregoing remarks, it proposes also to undertake another and more difficult work. It is the determination of its projectors, and the wish of its pub-

lishers, that its editorial columns should faithfully and fearlessly express the highest sentiments, the noblest aspirations, the common desires, the just criticisms, and the friendly warnings of all those who by precept and example strive to honor and fulfil the sacred vocation of the physician.

Truthfully to mirror forth, and, at proper times, to lead the sentiments and the progressive activities of the medical profession—from week to week vigilantly striving to daguerreotype the features and interpret the real significance of passing events—yet,

* * * "Nothing extenuate,
Nor set down aught in malice."

will be the constant and conscientious endeavor of this Journal. By every suitable means shall its pages encourage and promote the intimate and fraternal association and communion of medical men, ever striving to elevate the standard and ennoble the quality of medical education and professional ethics. To this end we desire that its columns should faithfully and acceptably utter for the whole profession the noblest sentiments and the most advanced opinions of those who best have loved and honored its high vocation.

The sacred unity, the high obligations, and the mutual interests and common rights of medical men will be recognized and encouraged on every page and in every paragraph, and under no circumstances will partizan and polemical discord be permitted to supplant the harmonies of professional charity and good-will. Fearlessly it will defend and promulgate the claims, the dignity, and the legitimate undertakings of the medical profession; and not less boldly will it endeavor to expose and root out those pestilent evils that disturb the peace, and threaten the security and usefulness of professional associations and medical institutions, and which seriously depress the popular status and moral influence of the profession at large.

In fulfilment of its mission as the faithful defender of the sacred trusts and the fraternal interests of medical life, this Journal will endeavor, by precept and example, to inculcate a conscientious regard for all the ethical proprieties and relative duties of the profession; and, in view of the obligations of humanity, and the sanctions of divine law, we shall, by every consideration and event, strive to illustrate and increase the professional and the popular estimate of that boon—*human life*—which in hospitals, asylums, almshouses, or penitentiaries, as well as in the homes of the people, is still the most sacred and precious of gifts divine.

In this spirit, and regarding physicians as the appointed ministers and conservators of life and the public health, no efforts will be spared, on our part, to keep posted in all that relates to the management and experience of the public institutions in our midst. Especially will Hygiene and every question relating to human health or public salubrity receive our most vigilant and faithful attention; while the enormities of empiricism, and every form of charlatanry, whether within or without the pale of the profession, will invite continual exposure and unsparing criticism.

With earnest endeavor and coöperation to secure for the profession a clear and universal recognition of its true status and mission, and believing that in our national Republic the medical profession is called upon to erect its own standards, and define its own rights, and the laws which shall govern its members, we shall steadily labor to advance the great primary objects of the AMERICAN MEDICAL ASSOCIATION, as the grand Congress of letters, polity, and ethical law,

for the Republic of American Medicine; and with equal earnestness shall we endeavor to inculcate the reciprocal obligations and claims of the profession.

THE AMERICAN MEDICAL ASSOCIATION.

ITS RECENT MEETING AT NEW HAVEN.

THE existence of a NATIONAL MEDICAL CONGRESS in the United States is so fully in accordance with the history and spirit of our Republican institutions that its practical workings and ultimate destiny have already become, in the medical world, subject to comments, criticism, and prophecy, that may justly admonish us to avoid the evils to which our voluntary associations and the democratic principles and usages of our times and country are peculiarly liable.

Called into existence by the urgent necessities of the profession, for the preservation of its honor, the promotion of its usefulness, and the elevation of its educational and its ethical standards, the American Medical Association has for thirteen years been steadily laboring to advance these grand designs, and with a success that is indicated not only by its twelve ponderous volumes of proceedings and reports, but by the universal interest in the discussions, and respect for the measures of the Association from year to year. Its first great work—that which laid the foundations for a higher state of professional unity and good will—commanded the highest respect from all the local associations of physicians in the several States of our Republic, so that the National Association had scarcely reached the third year of its existence before the code of medical ethics which it had submitted to the profession in 1847, was almost universally adopted by State and district medical societies throughout the land, carrying its spirit of true honor, dignity, charity, and moral purity into all the intercourse and duties of medical life.

Each returning year has been marked by progress and improvements of great importance, as the accredited representatives of the profession have gathered in the councils of the Association, and probably none of its annual sessions have been more deeply interesting in this respect than that at New Haven.

As will be noticed in the summary of its proceedings, an unusual number of interesting reports was presented by various committees. Among the most valuable contributions of a scientific character that came under our personal observation at the meeting this year, was an elaborate monograph on the Epidemics of the State of New York, by Dr. JOSEPH M. SMITH, of this city; another on the Medical Topography and Epidemics of North Carolina, by Dr. J. H. DICKSON, of Wilmington; and one by Dr. L. A. SAYRE of this city, on the Pathology of Articular Inflammation. These and all other contributions to medical literature, were severally referred to the appropriate sections, as contemplated by the resolution of Dr. J. B. LINDSLEY, and the action of the Association last year,—a provision, by the way, which promises to become of vast practical importance, and which added greatly to the interest of the meeting at New Haven.

It was reserved for the Committee on Medical Education to present the theme of most deeply absorbing interest to the convention, in a thorough, extended, well-drawn, and somewhat radical report, advocating most important and sweeping reforms. The resolutions submitted by the

Committee faithfully embody the spirit and recommendations of the report. Several of the resolutions were adopted by the Association, but the earnest and widely divergent expressions of opinion to which the discussions gave rise, served to demonstrate the fact that the universally admitted defects and evils in the present system of medical education in our country cannot be reformed by any local and spasmodic efforts, but that any reliable, hearty, and wide-spread improvement must depend primarily upon the moral sense and an ennobled *esprit du corps* in the profession at large. But we must forbear further remarks on this subject until we have the report on Education in our hands. Though neither the National Association of Physicians nor the Convention of Medical Teachers have yet been able to settle upon an acceptable plan of reform,—and much less, to agree in their own counsels on the subject, both bodies may safely report progress; and as they but reflect the popular sentiment of the profession, we may rest assured that when the great heart and body of the medical public are right the acts and decisions of the Congress of its chosen representatives will accord with the advanced views and earnest wishes of the noble men who now strive by word and deed to elevate the standard of medical life and professional learning.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION.

THIRTEENTH ANNUAL MEETING.

THE thirteenth annual meeting of the American Medical Association, was held in the city of New Haven, June 5th, and remained in session the two following days.

MORNING SESSION.

TUESDAY, June 5th.

The Association was called to order at 11 A.M., by the President, HENRY MILLER, M.D., of Kentucky. An appropriate prayer was made by Prof. FISHER, of Yale College, after which Dr. JONATHAN KNIGHT, on behalf of the Committee of Reception, tendered to all a hearty welcome. Dr. CHAS. HOOKER, as chairman of the Committee of Arrangements, followed in an appropriate address, assuring the Association that the honor done to New Haven was sincerely appreciated, and that not only the medical fraternity, but the citizens generally, were determined that the meeting should be a season of pleasant social intercourse, as well as profit to all the members.

The roll was next called by the Secretary, Dr. BEMISS, of Kentucky.

On motion of Dr. ATLEE, all the medical officers of the Army or Navy that were present, were invited to take part in the deliberations of the body.

The Committee on Parliamentary Rules made a statement to the effect that the report, principally the work of the chairman, Dr. CHAS. A. LINDSLEY, of Conn., was ready, and suggested the propriety of having copies of the same printed for distribution among the members, before they were regularly acted upon. After discussion the report was laid on the table.

A recess was here taken, to form the Committee on Nominations, consisting of one representative from each State.

About one o'clock, the association was called to order, when the names of the gentlemen composing the said Committee were reported as follows:—

District of Columbia, Dr. Boyle; Maryland, C. C. Cox; Kentucky, R. I. Breckenridge; North Carolina, James H. Dixon; Tennessee, I. S. White; Delaware, Lewis P. Bush; Louisiana, Austin Flint, Jr.; Minnesota, D. W. Hand; Georgia, N. W. Brown; Massachusetts, D. Humphreys Storer; Maine, Amos Nourse; Indiana, Daniel Meeker; New Jersey, J. S. English; Rhode Island, James H. Eldridge; New Hampshire, Geo. H.

Hubbard; Illinois, A. S. McArthur; Mississippi, U. G. Williams; Michigan, C. L. Ford; Pennsylvania, Wilson Jewell; Iowa, D. L. McGugin; Ohio, Robert Thompson; Missouri, M. A. Pallen; Vermont, Charles L. Allen; Virginia, James H. Connag; Connecticut, L. N. Beardsley; South Carolina, H. R. Frost; New York, H. D. Bulkley.

On motion, the Committee of Arrangements were requested to invite the members of the Connecticut Legislature to be present during the delivery of the President's Valedictory Address.

On motion of Dr. C. HOOKER, the Nominating Committee were requested to meet immediately after adjournment in the Trumbull Gallery.

The meeting then adjourned until 3 P.M.

AFTERNOON SESSION.

The Association was called to order by the President at 3 o'clock P.M.

Gov. BUCKINGHAM and Lieut. Gov. CATLIN appeared on the stage and were introduced to the Association. Several members of the Legislature were also present.

The President next proceeded to read his retiring address. In the course of his remarks he referred to the subject of criminal abortion, as a practice which was prevalent to an alarming extent among the community, and urged the necessity of legislators adopting such measures as would tend to prevent, if not arrest, the growth of the evil. The system of medical education received from him also a well merited criticism. He maintained that the qualifications of the medical professors were not sufficiently insisted upon in all cases, neither as a general rule were the examinations of students for the degree of Doctor of Medicine, as strict and thorough as they should be. In this connexion he pointed out the importance of preliminary education in students of medicine, as one of the surest steps towards the raising the profession to its proper standard.

Dr. ASKEW, in behalf of the Nominating Committee, next reported the names of the following gentlemen as officers for the ensuing year:—President—Eli Ives, Conn.; Vice Presidents—Wilson Jewell, Pa.; A. P. Palmer, Mich.; Joseph P. Logan, Ga.; J. N. McDowell, Mo. Treasurer—Casper Wistar, Pa. The report was unanimously accepted.

After the transaction of business of minor importance the officers elect were severally escorted to their seats upon the stage. Dr. IVES, the President, thanked the Association for the high honor conferred upon him in a few well-timed remarks. Dr. WILSON JEWELL, 1st Vice-President, stated that by the request of the President, he would assume the duties of presiding officer, and hoped by the kind co-operation of the members he should be enabled to do so with strict impartiality.

Dr. DAVIS, of Ill., offered the following resolutions:—

Resolved, That the general meetings of the Association, after this day, shall be restricted to the morning sessions, and the afternoon sessions, commencing at 8 o'clock, shall be devoted to the hearing of papers and discussions in the several sections.

Resolved, That each section shall choose its own officers, and make its own rules of order.

Resolved, That all essays, voluntary communications and reports, except those from the officers of the Association, and the committees on medical education, medical literature, and the committee on prize essays, shall be first presented or referred to the appropriate section and receive its recommendation, before they can be referred to the committee on publication.

The first and second resolutions were adopted; the third, however, called forth an extended discussion, and was finally laid upon the table.

The following gentlemen were appointed a Committee on Voluntary Contributions:—Drs. E. D. FORCE, of Ky.; T. W. BLATCHFORD, N. Y.; N. S. DAVIS, of Ill.; R. LA ROCHE, of Penn.; and T. F. ROCHESTER, of N. Y.

Dr. LA ROCHE was excused from serving, and Dr. REUCHBERGER, of Penn., was appointed in his stead.

The Treasurer's Report and the Report of the Committee on Publication were accepted and referred.

The Association, on motion, then adjourned.

EVENING SESSION.

WEDNESDAY, June 6th.

The Association was called to order by Dr. WILSON JEWELL, V. P. After the reading of the previous day's

minutes the rules of order were suspended to allow V. P. DR. LOGAN to offer his resignation; which was accepted.

The Committee on Medical Education, through Dr. REESE of N. Y., reported in favor of establishing additional chairs in the several faculties, of extending its sessions from six to nine months, and giving more facilities for instruction at the bedside. They offered the following preamble and resolutions as part of their report:—

PREAMBLE.—Whereas, it is the deliberate judgment of the American Medical Association, that the time has fairly come for the introduction of improvements into the present system of medical education, which shall elevate the existing standard of qualification for the Doctorate, and especially for securing and encouraging a higher degree of attainment in the science and of skill in the art of medicine than has been heretofore accessible to students in our country, and

Whereas, This body of American Physicians is regarded by our fraternity everywhere, as the acknowledged head and representative of the medical profession in the United States, and it is therefore looked to for prescribing the terms and qualifications of those who are henceforth to be admitted and recognised into our fellowship as brethren and equals in the profession; therefore,

Resolved, That it be hereafter regarded as an indispensable pre-requisite to enrolment as a student of medicine in the office of any regular physician, that the party shall be at least seventeen years of age, of good moral character and habits, and shall have received a good English, classical and mathematical education, and be able to read and translate the Latin language, and have an elementary knowledge of Greek, so far, at least, as to be able to trace the derivations from it to the English language.

Resolved, That this same requisite be made indispensable before matriculation in any regular medical college can be allowed, and that the Faculty of such College, and the preceptor of such candidate for enrolment, be required to ascertain such qualification by actual examination, and to certify thereto.

Resolved, That the term of study in the office of a regular practitioner, including attendance upon lectures, be, and is hereby extended to four years, the last year to be mainly employed in receiving clinical instruction in medicine, surgery and midwifery.

Resolved, That three full courses of lectures in a regularly incorporated college, or other body of lecturers recognised by the Association, be required of all candidates for the degree of Doctor in Medicine. Said candidate may be admitted to examination after three full years of study, on all the branches which they have been required to study, except clinical medicine, as above.

Resolved, That the period of instruction in every College be extended through the full term of nine months in each year, and that this time be divided into two sessions, the first to be chiefly occupied in instruction in the elementary branches only, and the latter to the practical and more complete branches. Those in attendance upon the former to constitute the junior class, and that upon the latter the senior. Not more than four lectures to be delivered on each day in either of the departments, and that each lecture be preceded by a recitation, in the form of question and answer, of the lectures of the day before.

Resolved, That the number of professors in each college should be increased, so as to bear some proportion to the largely increased number of branches, a knowledge of which is necessary. This increase to be made in addition to those holding clinical chairs.

Resolved, That the examination of all the students for matriculation, which admits them into the junior class, shall be repeated before their entrance into the senior class, either by the Faculty, or by examiners appointed by them for the purpose, who shall certify in the one case to the fulness of their preliminary education, and in the other to their improvement, under courses of instruction in the junior or elementary department. Admission to the senior class should be contingent upon this latter examination. Similar examinations should be required at the commencement of each session, as to the improvement made in the preceding term.

Resolved, That the final examination for graduation, if made by the Faculty, should be in the presence of each other, and should be witnessed and certified by a board or a committee of equal numbers, to be appointed for the purpose by each State Society, within whose bounds any college may be located, or by the Faculty, and without whose approval the degree should not be conferred. Due notice to be given by the Faculty of the time and place for the examination, and each candidate to be separately examined.

Resolved, That no medical college be recognised by the American Medical Association to be complete in its organization, and prepared to furnish the requisite instruction, which does not either possess a hospital of its own, or which has not made arrangements with a hospital containing not less than 80 beds, for the students of the college receiving regular clinical instruction, before being licensed to practice.

Resolved, That the so-called "College Clinics," cannot, in any useful or practical sense, be looked on as furnishing an adequate substitute for the clinical teaching required.

Resolved, That this Association regard with marked disapproval a practice which prevails with some of the Faculties of the Schools, viz: Of examining those students who are candidates for a degree, before the expiration of the regular session, and while the lectures are still in progress.

Resolved, That the titles of the several chairs in a school, as announced in its curriculum, ought to indicate a real teaching of the branches thus virtually promised to be taught, and not be assumed merely in conformity with further usage, or to gratify the temporary whim of a professor, to have an appendage to the title of his chair, which in the very next year he may abandon, and consent to its being appended to some other chair, or to its being omitted entirely in the next annual announcement. We may instance this, attaching physiology to anatomy, the latter being the substantive branch, and of itself taking up the whole time of the professor during the entire session, which is still too short for its legitimate purposes. Still more common and misleading is the appendage of the diseases of women and children to midwifery, and that of medical jurisprudence at one time to materia medica, at another to midwifery, at a third to chemistry.

On motion of Dr. McDOWELL, of Mo., the Association went into Committee of the Whole on the above resolu-

tions, and after debate, reported progress, and asked leave to sit again.

Report of Committee on Medical Literature was referred to the Committee on Publication without reading.

The Committee upon the time and place of next meeting made the following report: That the next meeting of the Association take place in Chicago, Ill., on the 1st Tuesday in June, 1881.

They also nominated for Secretaries Drs. S. G. HUBBARD, of Conn., H. A. JOHNSON, of Ill., and the following Committees:

Committee of Arrangements:—Drs. DAVIS, FREER, DR. LASKIE, ANDREWS, JONES, BEVING, and BLOODGOOD.

On Prize Essays.—Dan'l Brainard, Ill., D. L. McGuigan, Iowa, M. L. LITON, Mo., John Evans, Ill., A. L. McArthur, Ill.

Committee on Publication.—F. G. Smith, Pa., Caspar Wister, Pa., S. G. Hubbard, Conn., K. J. Breckenridge, Ky., Edward Hartshorne, Pa., H. F. Askew, Del.

Vice President.—In the place of Dr. Logan, resigned, R. D. Arnold, Ga.

The Prize Essay Committee made their report, stating that several communications had been received, but none in their opinion came up to the required standard.

The rules of order, on motion, being suspended, Dr. DAVIS, of Ill., brought forward the 3d resolution which had been offered the day before and laid on the table. After several alterations and amendments, it was adopted as follows:—

Resolved, That all essays, voluntary communications, and reports, except those of officers of the Association, reports of committees on medical education, medical literature, and prize essays, shall be first presented to the Association, and referred to the appropriate section, in which they shall be examined and discussed; after which they shall be returned to the secretary of the Association, accompanied by an expression of opinion as to whether they are worthy of publication or not, and the Secretary shall pass all such designated to be worthy directly to the Committee on Publication; and others not so designated shall be retained by the Secretary or returned to their authors, as the latter may indicate.

Dr. LEWIS A. SAYRE read a paper on Morbus Coxarius, which was referred to the Section on Surgery. Several other special committees which were appointed at the last meeting to report on various diseases, were called up, and all those reports which were not laid over, were referred to the several sections.

The Association adjourned.

WEDNESDAY AFTERNOON.

The Convention, in accordance with the resolutions of Dr. Davis, passed the day previous, adjourned to meet in sections.

THURSDAY MORNING.

The Convention was called to order at 9 o'clock—Dr. WILSON JEWELL, V. P., Chairman.

Dr. ARNOLD, of Ga., in order to facilitate the transaction of business, offered a resolution to the effect, that no member be allowed to speak, or to read an address, which should occupy more than ten minutes. Adopted.

On motion of Dr. SHATTUCK, the rules of order were suspended, in order to give Dr. BOWDITCH, the Chairman of the Committee on the Hunter Memorial, an opportunity to report. The report was referred to the Committee on Nominations.

The Committee appointed by the Association to confer with the Medical Teachers' Convention, made their report. The Chairman, Dr. SHATTUCK, first read the following resolutions, as adopted by the Teachers' Convention:—

1st. **Resolved,** That the Medical Colleges represented in this Convention, are willing to adopt the rule, if it be recommended by the American Medical Association, that every candidate for degree of Doctor of Medicine must present certificates of having assiduously studied medicine during the period of three full years under the direction of a regular practitioner of medicine, recognised as such by the American Medical Association, who shall certify to the same under his own hand, and of attendance on two full courses of medical lectures in a medical school, recognised as regularly organized by the American Medical Association, with an interval of at least three months between the termination of the first course and the commencement of the last.

2d. **Resolved,** That the medical colleges represented in this Convention, are willing to keep a register of their students, in which shall be entered the name, the age, the period of commencing medical studies, and diploma already received, with the name of the college conferring it, and the name of the preceptor.

3d. **Resolved,** That the medical colleges represented in this Convention, allowing that the proposed plan of admitting delegates from State Societies to attend the examination of the candidates for the degree of Doctor in Medicine to have been successfully carried out in several places, do not think that it can with advantage be universally adopted; but at the same

time they are ready to entertain and discuss any other measure by which the admission of unsuitable and unworthy members within the ranks of the profession can be prevented.

4th. *Resolved*, That this Convention earnestly recommend the American Medical Association to adopt such measures as will secure the efficient practical enforcement of the standard of preliminary education adopted at its first organization in May 1847, or of a standard put forth by the medical society of the State in which a college is located, and that medical colleges will thankfully receive and record the certificates alluded to in said standard, and of moral character, whenever the profession generally, and the preceptors will see that students are properly supplied with them.

5th. *Resolved*, That Hospital Clinical instruction constitutes a necessary part of medical education, and that every candidate for the degree of Doctor in Medicine, shall be required to have attended such instruction regularly for a period of not less than four months.

6th. *Resolved*, That the members of this Convention are ready to co-operate in any efforts by which the attention of the community and of legislatures shall be called to the importance of the endowment of medical colleges and professorships.

Dr. SHATTUCK, on the part of the Committee of the Association, offered the following series of resolutions:—

Resolved, That it is the duty of medical colleges to require of every candidate for the degree of Doctor in Medicine, certificates of study during the full period of three years, under the direction of a regular practitioner of medicine, recognised by the American Medical Association, who shall certify, under his own hand, as to an attendance on two full courses of lectures, with an interval of at least three months between the termination of the first and the commencement of the second course.

Resolved, That every medical college shall keep a volume, in which every medical student presenting himself, shall enter his name, his age, the period of his commencing the study of medicine, any diploma he may have received in evidence of previous education, with the name of the college or school from which he received such diploma; and the name of the preceptor with whom he has been studying.

Resolved, That hospital clinical instruction constitutes a necessary part of medical education, and every candidate should be required to have attended such instruction regularly for a period of not less than four months.

Resolved, That the professors of every medical college should recommend to their trustees, or board of managers, the adoption of a rule authorizing them to allow the attendance of two or three delegates, from the State Medical Society, at all examinations of candidates for the degree of the doctorate, and accord to these delegates a vote on the question of recommending such candidates for a degree.

Resolved, That every State Society be recommended to choose proper delegates at its annual meeting, to attend the examination of candidates for the degree of M.D., at all the medical colleges within their respective States.

Resolved, That this Association will not recognise as a regular organization, any college which does not require evidence of suitable preliminary education from all applicants for collegiate medical instruction.

Resolved, That we commend the use of all proper efforts, by which the attention of persons of means and liberal disposition, as well as legislative bodies, shall be directed to the propriety of endowing such medical colleges, and professorships thereof, as shall be recognised by the Association.

Resolved, That this Association recognise as a regularly organized medical college, one which has been represented at any meeting of this Association, and which complies with the preceding rules and directions.

Resolved, That this Association recognise as regular practitioners of medicine, all who have been members of this Association, and have not forfeited their rights and privileges, and all members of State and County Societies, in full standing.

On motion the report was received and the resolutions taken up seriatim. The first elicited much discussion and was finally adopted, with the following amendment by Dr. ATLEE, as a substitute for the last clause: "And no student shall attend a second course of lectures, until a year shall have elapsed since the commencement of the first course." The last resolution was laid on the table, the remainder adopted. The report was then referred to the Committee on Publication.

The following committees, to serve the ensuing year, were reported by the Nominating Committee and accepted:—

Committee on Medical Literature.—Drs. FRANK H. HAMILTON, N. Y.; ED. WARREN, Md.; CHAS. A. LEE, N. Y.; J. W. C. ELY, R. I.; E. H. CLARK, Mass.

Committee on Education.—Drs. S. T. JOYNE, Va.; C. C. COX, Md.; J. C. BRADBURY, Me.; L. H. STEINER, Md.; and M. A. PATTEN, Mo.

The Nominating Committee also offered the following resolutions:—

Resolved, That it be recommended to the different States to collect subscriptions of not more than one dollar each, from every regularly educated physician. All money so collected to be forwarded by the Chairman of the Committee hereby appointed, to the Treasurer of the HUNTER Medical Fund in London.

Resolved, That Drs. Henry I. Bowditch, Mass.; Amos Nourse, Maine; George B. Twitchell, N. H.; Charles Clark, Vt.; G. L. Collins, R. I.; Charles Hooker, Conn.; Henry D. Bulkley, N. Y.; Wm. Elmer, N. J.; Jno. L. Atlee, Penna.; James Cowper, Del.; C. C. Cox, Md.; J. B. McCaw, Va.; Cornelius Boyle, D. C.; James H. Dickson, N. C.; H. K. Frost, S. C.; R. D. Arnold, Ga.; John Nott, Ala.; G. A. Nott, La.; W. G. Williams, Mass.; C. A. Page, Mo.; J. B. Lindsey, Tenn.; R. J. Breckenridge, Ky.; J. W. Russell, Ohio; A. B. Palmer, Michigan; Calvin West, Ind.; Patrick Gregg, Ill.; D. L. McGugin, Iowa; J. B. Douseman, Wis.; D. W. Hand, Minn.; O. Harvey, Cal.; F. G. McParson, Ark., be a committee to collect subscriptions.

A copy of the above resolutions was directed to be sent to the medical schools throughout the country.

A resolution was passed that the Association give its seal to each medical school in good standing, with the power of reclaiming the same upon sufficient evidence that the school was no longer entitled to its possession. Adjourned.

THURSDAY AFTERNOON—CLOSING SESSION.

The Association met at 4 P.M., WILSON JEWELL in the chair.

Several reports on the Secretary's table were referred to the Committee on Publication with power.

The various papers reported from the sections were referred to the Committee on Publication.

The Essex Co. Medical Society of the State of New Jersey presented the following preamble and resolutions:

Whereas, The indiscriminate sale of poisonous drugs at retail is fraught with danger to the community; be it

Resolved, That in the opinion of this Association, it is the duty of the public authorities in the different States of the Union, to pass prohibitory laws against the retailing of morphia, strychnine, prussic acid, etc., except on the written prescription of a regular practitioner of medicine, or on the personal application of a well-known citizen—and that a committee be appointed in the different States, to endeavor to carry into effect the spirit of the resolutions.

The paper was received and the resolutions adopted.

The report was referred to the Committee on Publication with power.

Dr. A. N. DOUGHERTY, from the Committee on Tracheotomy, reported, and at his own request the report was referred back to the committee, with power to complete the report.

Resolutions tendering the thanks of the Association to the profession and citizens of New Haven for their hospitalities were passed, when the Association adjourned.

DEATHS.

ISAACS, Charles E., M.D., Saturday, June 16, at Brooklyn, N. Y., aged about 43.

A biographical sketch will appear in the next number.

RICHARDS, Joseph B., M.D., Senior Assistant Physician to Bellevue Hospital, N. Y., Monday, June 4.

Dr. Richards was a native of Oneida County, N. Y. He studied his profession with Dr. Guiteau, of Trenton, and attended his first course of lectures at the Albany Medical College; subsequently he attended two courses at the College of Physicians and Surgeons, from which school he graduated. He entered Bellevue Hospital Oct. 1, 1859, and had just commenced his term of service as Senior Assistant Physician when he was suddenly attacked with peritonitis, the result of perforation of the appendix vermiciformis, of which he died after a short but painful illness. Dr. Richards was greatly esteemed by his associates.

MEDICAL DIARY OF THE WEEK.

Monday, July 9.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Elliot, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, July 10.	{ BELLEVUE, Medicine, Dr. Thomas, half-past 1 P.M. CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M.
Wednesday, July 11.	{ ACADEMY OF MEDICINE, 8 P.M. EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Sayre, half-past 1 P.M.
Thursday, July 12.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Loomis, half-past 1 P.M.
Friday, July 13.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, July 14.	{ BELLEVUE, Surgery, Dr. Church, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

Original Lectures.

LECTURE ON CLINICAL SURGERY.

DELIVERED AT THE NEW YORK HOSPITAL.

BY

WM. H. VAN BUREN, M.D.,

SURGEON TO THE HOSPITAL.

GENTLEMEN:—As I am about to relinquish temporarily the service in which most of you have followed my public visits during the past two months, I wish, in justice to those of you who have kept notes of cases, to complete, as far as possible, the clinical history of several of them which possess more than usual interest; and I will speak first of the case of

NECROSIS OF THE THIGH,

which was the subject of operation on the 3d of last month, just three weeks ago yesterday. The patient, Wm. Limburgh, Ward No. 9, 19 years old, is a farm laborer, from Dutchess Co. in this State, and, as you will recollect, was attacked four years ago by a painful inflammation of the lower part of the left thigh, following a sudden check of perspiration by bathing when heated, which confined him to bed for several weeks, and terminated by suppuration and ulceration, leaving two sinuses near the popliteal space, through both of which, at the time of his admission to the hospital, on the 26th of April, bare bone could be felt by the probe. His general health, at this time, was good, the lower third of the affected femur about double its normal size, and he suffered little pain from the disease, except after active exercise, when it became inflamed, and the discharge from the sinuses increased. In this condition, unable to do his share of labor on the farm, he applied for relief. His disease was recognised as necrosis of the femur, in which, in consequence of an attack of acute inflammation of the shaft of the bone, a portion of it had died, forming what is known as a *sequestrum*, and at the same time, apparently, the conservative energies of the system, in order to preserve the functions of the limb, had thrown around this sequestrum a shell of new bone, continuous with the portion of the femur which had remained sound. The presence of this sequestrum then, in the interior of the newly formed shaft—technically known as *involutum*—keeping up the discharge from the sinuses, constituted his disease, and the operation which we performed for its cure consisted, as you will remember, in exposing the involutum by a free incision on the outer side of the thigh, some six inches in length, opening its cavity largely by several applications of the trephine assisted by the mallet and gouge, and withdrawing, through the opening thus made, by means of appropriately shaped forceps, this large and characteristic sequestrum which, when whole, was nearly six inches in length, and involved pretty much the whole diameter of the original shaft of the femur. The cavity from which it was taken was lined by a soft pulpy membrane which communicated a velvety feel to the finger. This cavity, at the present time, is nearly filled up. The limb, after the operation, was placed upon a double-inclined plane, so as to secure the escape of its contents by a depending outlet, and the external wound was left entirely open. The patient has not had an unpleasant symptom, and is now, as you have seen, nearly well. Now this is a typical case of a not uncommon disease, occurring in young subjects, chiefly males, from the age of 8 to 20, and generally from a similar cause, viz: sudden chilling when heated, such as lying on the ground, or bathing immediately after violent exercise. Acute inflammation of a bone, and generally one of the long bones, takes place, characterized by intense deep-seated pain in the part, and severe constitutional symptoms, such as

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fever, and sometimes delirium. The bones are at this period of life exceedingly vascular, their development being yet incomplete, and those belonging to the locomotive apparatus—the long bones—being most actively employed, are most liable to become the seat of trouble. The bone affected dies at once, but nature almost simultaneously sets about repairing the loss, by throwing a new shaft of bone around the portion which has died, in order to save the limb, but this newly formed bone (the *involutum*) often encloses the dead portion (the *sequestrum*) so perfectly, that it cannot be separated and thrown off by the unaided efforts of nature, and here is the opportunity for the interference of intelligent surgery. Cases of this kind often remain uncured for years for the want of an operation similar to that performed in this case. The idea is prevalent that they can be safely left to nature, but this is incorrect; it is the surgeon's duty, in such cases, to advise an operation, and I will tell you why. A sequestrum such as this, and similar to these other specimens that you see upon the table from the museum of the Hospital, tends, under the influence of gravity, and the constant motions of the limbs, to travel downwards, and to endanger, by its change of position, the integrity of the popliteal artery, and also of the knee joint, by penetrating them by its sharp points, which are exceedingly liable to cause ulceration. I know of the case of a medical student who lost his life by hæmorrhage from perforation of his popliteal artery by a sequestrum similar to the one in the case now before you. Amputation of the thigh was resorted to in the end, but too late, and he died exhausted. In a somewhat similar instance of necrosis, which occurred under my care in this hospital, the knee-joint was perforated by a sequestrum, and it was only by prompt amputation, above the knee, that the patient's life was saved.

Moreover, as you can now understand, the limb affected by necrosis is often useless, always a source of annoyance, and liable to frequently recurring attacks of inflammation, and the sequestrum, as a rule, cannot escape without assistance. Add to this that the operation is free from danger, when judiciously performed, and almost always successful, as in this case, and I think you will agree with me that it should be advised. Since the use of anæsthetics in surgery, operations for necrosis are much more common than formerly.

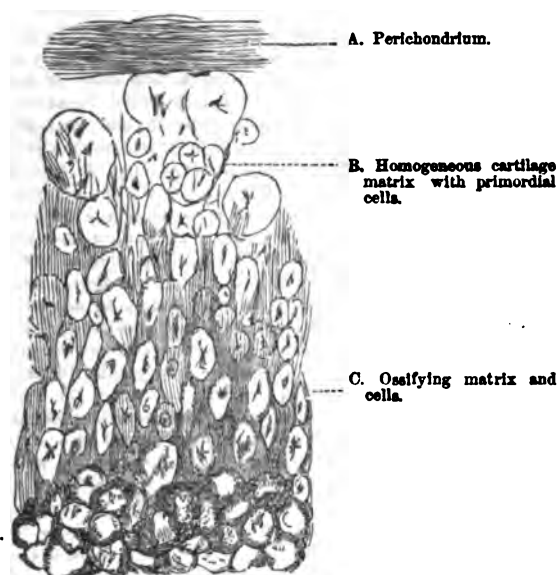
The next case is that of the young man, in Ward No. 6, from whom we removed the

ENCHONDROMA, OR CARTILAGINOUS EXOSTOSIS OF THE FEMUR,

on last Monday week. The patient, a clerk from Williamsburgh, 18 years of age, had a hard lump on the outside of his right thigh, just above the knee-joint, which had been growing 11 years. It had given him little pain, except after walking or running, and seemed to be attached to the femur itself. In consequence of its proximity to the knee-joint, and its steadily increasing size, I advised its removal, and this was readily effected through an incision involving the integuments, *fascia lata* and *vastus externus* muscle, by which it was covered. We found it growing from the outer condyle of the femur, by a pedicle about an inch in diameter, which, as you will remember, we divided by the chain saw. The wound was left open, and the thigh placed upon an inclined plane; no unfavorable symptoms have occurred, and it is now granulating rapidly.

The tumor, which is now before you, is a beautiful specimen of a rather rare disease generally known as cartilaginous exostosis, or perhaps more correctly described as an enchondroma, a tumor composed of cartilage, which is undergoing the process of ossification. It is irregularly nodular upon its surface, and sessile, as a botanist would say, upon the outer condyle, by a peduncular attachment. The peduncle and about one half of the tumor is true bone, and its nodular surface is invested by a layer, varying from a quarter to half an inch in thickness, of perfectly normal cartilage. The accompanying wood-cuts give a fair idea of its general aspect, and also of its minute structure, as drawn

from the appearance presented by delicate sections under the microscope, by Dr. Wm. H. Draper, microscopist to the hospital:



The section represented was taken from the line of junction between the true bone and its cartilaginous investment, as recognised by the naked eye, and it shows the gradual conversion of the cells of the cartilage into the structure of bone, very much the same as is seen in a similar section of a child's bone in process of normal ossification from the temporary cartilage of which the whole skeleton consists in early foetal life.

Thus it is evident that this tumor is of the benign variety, and we can promise a permanent cure to the patient. The enchondroma was first described by Johann Müller, the celebrated professor of anatomy and physiology at Berlin, and the best authorities on the subject are Paget, Hawkins, and Nelaton. These tumors are most generally developed upon the phalanges and metacarpal bones, but occasionally elsewhere. Here is a representation of an enchondroma, the size of an orange, which I removed from the scapula of a young woman. It grew from both sides of the bone and about a fourth part of it was necessarily removed with the tumor; the patient made a good and permanent recovery.



Ossification is a frequent, but not a necessary feature in these cartilaginous tumors, and although benign in character, as shown by their histological constitution, yet they will occasionally return. I have here on the table a huge mass of bone, the result of an ossified enchondroma, of

about twenty years' growth, involving the lower half of the femur, for which I was obliged to amputate the patient's thigh; he recovered, and several years later, the disease having returned in the remaining half of the femur, and causing great pain by pressure upon the nerves of the stump, I removed the bone of the hip-joint, from which he also recovered, but died four years afterwards in consequence of obstruction to the functions of the rectum and bladder by a growth of similar character, which developed itself in the *os innominatum* of the same side, and invaded the cavity of the true pelvis. An enchondromatous tumor of considerable size, involving the symphysis of the lower jaw, was recently removed from a middle-aged man in this hospital, by my colleague Dr. Parker.

SECONDARY AMPUTATION OF THE THIGH THROUGH THE LESSER TROCHANTER FOR COMPOUND FRACTURE OF FEMUR.

I bring before you, in the next place, the boy Henry McPyke, from the same ward, 18 years of age, whose thigh was amputated six weeks ago. He fell through a hatchway on the 1st of March, a distance of some thirty feet, and in addition to a bad compound fracture of the right thigh, sustained a comminuted fracture of the radius and ulna near the wrist-joint of the same side, and also concussion of the brain. His delirium, and exceedingly desperate condition, rendered it impossible to keep his fore-arm in splints, and hence this fracture, as you see, has united with considerable deformity. A bed-sore formed over the sacrum, and early in April it became evident that, in order to save his life, it would be necessary to amputate the thigh above the seat of injury. You may recollect that the thigh, at the point where the operation was performed, was occupied by a large sinus, and that we performed the circular operation, leaving the wound open to heal by granulation. Afterwards several scales of bone exfoliated from the sacrum, and a sinus extended from the bed-sore upwards beneath the lumbar fascia, which was arrested by a counter-opening, and since this he has recovered rapidly. Both bed-sore and stump of thigh are, as you see, now nearly healed, and the boy, as is often the case in those who have lost a limb, is growing fat. The successful result in this case is more than we had a right to hope for, as compound fracture of the thigh, even when uncomplicated by other injuries, is generally a fatal injury, and his recovery is attributable to the early age of the patient.

REFRACTURE OF THE FEMUR FOR BAD UNION.

On the 19th of April we refractured the femur of a sailor whose thigh was broken on board ship in the Mediterranean, and who lay in his berth, without surgical dressing of any kind, until his arrival at this port, six weeks afterwards. It was a simple fracture from a fall from a yard-arm upon the deck. It is an interesting fact that it had united firmly, so that he could use it, after a fashion, in walking, upon his arrival at the hospital, but there was shortening of the limb to the extent of two and a half inches, and marked deformity, by rotation outwards, of the foot, leg, and lower fragment of the femur. In other words, the fracture had united as the limb lay upon its outer side, without assistance from splint or bandage. This is the result which usually followed the plan of treatment advised by the celebrated English surgeon, Percival Pott, in the latter part of the last century, and it explains the limping and shuffling gait, which you may occasionally even now observe in patients thus treated. There is no mode of surgical treatment advocated by this excellent surgeon which has been more satisfactorily improved, since his day, than that of fractures of the femur, and it is a gratifying reflection that the main feature of this improved treatment is of American origin. I refer to the employment of adhesive plaster for the purpose of effecting extension and counter-extension in these fractures, without pain to the patient, or risk of abrasion or eschar to the limb. It was the fear of these evils that led Pott to discard the straight splint, and rely upon position, in the treatment of the fractures of the thigh. The improved mode in which these

fractures can now be managed, justifies the performance of the seemingly unsurgical operation of refracturing bones when they have united with so much deformity as to impair the function of a limb. The refracture was effected by the simplest means, and the compound pulleys applied for the purpose of elongating the limb, and bringing the ends of the fragments into coaptation. The straight apparatus was then applied, whilst the patient was still anesthetized, and you had an opportunity of witnessing the details of the process, and the mode in which the experience of this Hospital has perfected the application of the adhesive plaster. This treatment was followed by no unpleasant symptoms, and the patient at the present date is in excellent condition, and his limb in good position, with prospect of union with less than half an inch shortening.

The results of this practice, which has been frequently adopted in this hospital, are very satisfactory. Our senior surgeon, Dr. Gurdon Buck, who has employed it in a number of cases, has recorded his experience in a paper published in the Transactions of the New York Academy of Medicine. Similar cases occur frequently in seaport towns, and the surgeon is thus enabled to remedy a deformity which would otherwise render the sailor a cripple for life.

Original Communications.

TWO CASES OF MORBID GROWTHS OF THE EXTREMITIES.— AMPUTATION.

BY WILLARD PARKER, M.D.,

PROFESSOR OF SURGERY.

ENCHONDROMA OF THE THIGH—AMPUTATION OF THE THIGH. —RECOVERY.

Case.—Mr. Saries, æt. 30, by occupation a farmer, large and well formed, with no marks of any cachexia, first noticed, six years ago, a small, hard tumor, situated in the anterior part of the thigh, a little distance above the knee. Does not know whether it was then movable or not, but since that time it has been rapidly increasing in size. It has never given much pain, and is not tender. When he first came under my notice, a few weeks ago, it extended from the knee joint to within four inches of the trochanter major, and enveloped the shaft of the femur; it measured thirty-five inches in circumference at its point of greatest convexity. The shape of the tumor appeared to be nearly oval. The skin was healthy, though quite tense; the veins on the surface considerably enlarged; the temperature of the surface much heightened. The tumor was firm and resisting to the touch, excepting at one or two points where it had commenced to soften, and it was so closely adherent to the bone as to be immovable.

Amputation was advised, and the patient consenting, it was performed on the afternoon of Thursday, Nov. 25th, 1858. The operation was attended with profuse hemorrhage (venous), derived principally from the tumor. After the operation was concluded and the patient had recovered from his anesthesia, a dose of McMunn's elixir was administered, and directions left to give brandy through the night as the case might require. The patient had obstinate nausea and vomiting, so as to necessitate the administration of brandy with a few drops of the opiate per rectum. This enema was repeated three times before the vomiting was finally controlled by a mustard draught on the epigastrium; extremities cold throughout the night; pulse exceedingly feeble and frequent; at times running up to 170; patient very restless.—9 A.M., Nov. 26th. More quiet, pulse 130, and growing fuller; extremities warm.—9 P.M. Has vomited several times through the day,—pulse 125. Brandy omitted; beef-tea and arrow-root to be given from time to time through the night.—6 A.M. Nov. 27th. Patient

passed a quiet and comfortable night—takes his food with a relish, and is cheerful and hopeful, pulse 118 and full. Convalescence rapid.

Examination of the Tumor by Dr. W. H. DRAPER.—The tumor measured in its greatest circumference 35 inches. It extended from the femoro-tibial articulation to within four inches of Poupert's ligament; four-fifths of the tumor were anterior to the bone; the surface was irregularly lobulated, the lobes varying in size from a hickory nut to a foetal head; the lobes themselves were very finely lobulated; the whole presenting the appearance of cauliflower. The consistence of the tumor was generally firm and elastic; a few cysts situated superficially gave evident fluctuation. The tumor was surrounded by a fibro-cellular envelope, the lobes being separated by strong fibrous septa, and the lobules imprisoned in a firm fibrous stroma. The muscles of the thigh were some of them spread out to the thinness of the platysma, others laid in the grooves between the lobes. The vessels and nerves were channelled through the substance of the mass.

The fresh section of the tumor presented varied and striking appearances. In places the surface was smooth, shining opalescent, and mapped into lobules by the interlacing fibres. At other points the tissue was discolored, of a yellow and reddish hue, as if by the extravasation of blood. In other places the consistence was almost gelatinous, and the fibrous stroma was infiltrated with a colloid matter. At several points true ossifications were observed. This was especially marked in the portions near the bone, but was also evident at points at a distance from and having no connexion with original osseous structure. Masses of calcific matter were very common in the cartilaginous lobules. In examining one of the points of softening the finger penetrated a cavity as large as the fist, having softened walls and partially filled with a semi-gelatinous fluid.

The microscopical examination of the tumor presented the characteristics so fully described by Mr. Paget as belonging to this variety of growths. Its general structure, as might be inferred from the above description, was fibro-cartilaginous. The cells—the medium dimensions of which varied from 1-1000th to 1-1500th of an inch—presented a great variety of forms. They were free and imbedded with more or less closeness, sometimes in a homogeneous hyaline structure, and sometimes in a more or less delicate fibrous matrix. The tufts, or radiating fasciculi of fibres described by Paget, were very numerous. Many of the cells presented evidence of fatty degeneration.

According to Mr. Paget the rate of growth of cartilaginous tumors varies greatly. They sometimes increase very slowly, at other times with rapidity. A case occurred in St. Bartholomew's Hospital, where in the course of three months from the first appearance of the tumor it increased so as to occupy the whole length of the femur, and to have the circumference of a man's chest. The tumor was supposed to be cancerous, and amputation was not deemed expedient. After death the tumor was found to be cartilaginous. Mr. Paget mentions other cases which attained considerable size in the course of four and eighteen months. These form exceptions to the rule that the malignant grow more rapidly than innocent tumors. He also mentions several cases in which the tumors attained the circumference of twenty inches and more, and one, in the practice of Sir Philip Crampton, which measured six and a half feet in circumference.

RECURRING FIBROID TUMOR OF THE ARM—AMPUTATION AT THE SHOULDER-JOINT.

Case.—(Notes by DR. PINKNEY, Senior Assist.) J. G., æt. 40, native of Ireland, was admitted to Bellevue Hospital, May 29, 1860. The patient gave the following history of his disease:—Thirteen years ago he fell, striking his arm so severely that for a few days he was unable to use it, but he finally recovered completely, as he supposed. The following year the arm began to swell; an abscess formed on its external aspect, which discharged through several

sinuses nearly two years, the arm becoming much swollen down to the hand. The sinuses at length healed, and he had no further trouble with the arm for ten years. About eight months ago the lower part of the arm again began to swell in the vicinity of the elbow, attended with lancinating pains. Poulices were applied to promote suppuration, it being considered an abscess. It continued to grow rapidly until his admission.

On examination it was found to present the following appearances:—It extended from the upper third of the arm to the upper third of the fore-arm, measuring 27 inches in its greatest circumference, and 12 inches from base to apex; it gave to the touch on the outside the feeling of a semi-solid mass, and on the inner aspect fluctuation was distinct; the veins running over the tumor were large and well-defined. On the inner surface there was a slight abrasion, and at its most depending position an ulcer had formed, the result of a slough, three inches in diameter. Immediately above this ulcer, on the inside of the tumor, there was a nodular enlargement, about two inches in diameter, on which the cicatrix of an old ulcer was apparent; several other cicatrices were detected. The brachial artery could be traced over the middle of the tumor; and pulsations were felt some distance. The pulse at the wrist was quite feeble. The patient suffered from night sweats, and his face indicated constitutional disturbance.

On consultation, it was decided to remove the arm at the shoulder joint. The operation was performed June 2d; convalescence was rapid, and the patient is apparently recovering his general health.

On examination of the tumor by the microscope, it was found to be composed almost entirely of exceedingly long and narrow cells, which, at first sight, might have been taken for fibres. Most of these contained a nucleus, although in some it appeared to be wanting. A few free nuclei were also seen and an abundance of granules, the latter being for the most part fatty.

The examination left no doubt as to the nature of the tumor. It evidently belonged to a group of morbid growths, which have been carefully studied and described by Mr. Paget, and for which he has proposed the name "Recurring Fibroid"—a term which expresses very well their principal features. Although they resemble fibrous tumors to the naked eye, their minute structure is ascertained by the microscope to be cellular, the cells being of various shapes, but always very narrow in proportion to their length, and often terminating in long, single or double filamentous processes. The term "Recurring" has been applied to these tumors on account of their proneness to return after removal, and, in this respect, they agree with true cancerous growths. Their minute structure, however, is entirely unlike that of cancer, and their physiological resemblance is incomplete; for although, like cancerous tumors, they are liable to return after removal, yet they exhibit no tendency to affect either the lymphatic glands, or the internal organs. They also differ from cancer in another important particular, since, however often they may return after excision, their recurrence is unattended with any signs of constitutional cachexia.

A CASE OF POISONING BY EATING THE SEEDS OF THE DATURA STRAMONIUM.—RECOVERY.

BY JOHN G. JOHNSON, M.D.,

OF BROOKLYN, N. Y.

On Tuesday evening the 27th of September, 1859, I was called to see a child, a patient of Dr. Marvin's, who had been poisoned by eating the green seeds of the *Datura Stramonium*. The boy, a lad of seven years, had been playing that afternoon on the Heights with some of his fellows, who told him that the seeds of this plant were good to eat, when

he picked the burrs, and, crushing them, ate the seeds of several. The precise amount eaten could not be ascertained. He returned home about five o'clock, and inquired of his mother what they were to have for tea. She noticed there was some hesitation in his speech, and that his face was flushed. As it was some two hours before dinner, she gave him an apple to eat. As he divided it, she noticed a peculiar twitching of his fingers, and as he handed his mother a portion there was a movement of his hands like a patient with chorea. On biting the apple, which was quite juicy, he said it was dry like flour, and that it hurt his throat; he threw it aside, and lay down on the lounge. His mother inquired if he was sick, and he replied in tones so loud and violent that it startled her. As the twitching increased, she lifted him up to get him up stairs, when she found he staggered so as to be hardly able to walk, and in passing through the door fell against it. Dr. Marvin was called, who directed an emetic immediately, and requested me to attend, as he was unwell. I first saw the child at seven o'clock, about two hours and a half after he had eaten the seeds of the stramonium. He was then tossing violently in his father's arms, with a spasmodic twitching of the hands like a child agitated and suffering from chorea. The pupil of the eye was enormously dilated, more so than I have ever seen from the full action of belladonna; the face, and especially the mouth, was much swollen; he was perfectly blind, the full flash of the gas failing to produce the slightest contraction of the pupil. There were such violent movements of the hands and subultus tendinum that it was impossible to count the pulse. The heart's action was feeble, but not increased in frequency. There was no perspiration on any part of the body. The feet and whole lower extremities were cold and palsied, and hung powerless over the father's lap, in marked contrast to the rest of the body, which was so much agitated.

There had been some emesis from the emetics already given, but not free; a tablespoonful of mustard and another of salt were immediately mixed with warm water, and pressing the tongue strongly down, I attempted to make the child swallow it; considerable difficulty, however, was found in deglutition, and such severe symptoms of strangulation supervened, that the parents would not allow me to repeat my endeavors to make the child swallow. But most of the mustard was, however, forced down, and we soon had the pleasure of seeing free vomiting; a large amount of food was thrown off from the stomach, and the seeds of the *Stramonium* much swollen, so as to appear nearly the size of tomato seeds. As there had been no action of the bowels, a strong soapuds enema was administered as a derivant and to unload the bowels. The child seemed now to be going into convulsions, and his head was immediately placed under the cold shower bath, while his body reclined in warm water, as the coldness of the limbs had increased. Strong coffee was also forced down, though with great difficulty, as the child seemed to choke at every attempt to swallow.

9 P.M.—The child has had no convulsion, is picking at imaginary bodies in the air, and has a violent maniacal action; cannot articulate, but the words he attempts are loud and harsh; the pupil of the eye is extremely dilated, and does not respond in the slightest degree to the light; the coldness of the extremities and loss of power marked; coffee is continued.

10 P.M.—The child hears sounds more distinctly. His brother played upon the guitar, and sang a favorite tune; boy noticed the music, but turned in an uncertain manner towards him; attempts to sing, but cannot; is very violent in the attempt to articulate; involuntary movements of his hands continue; his pupils still dilated; the extremities cold and palsied. The coffee is to be continued.

5 A.M.—Pupil still enormously dilated; patient perfectly blind; hearing good; cannot tell whether the gas is lighted or not; the pupil does not contract in the slightest from the full glare of the light on it; the limbs are still paralysed; some improvement in his speech; can now articu-

late more distinctly, still not so that a stranger can understand him; same fierceness in his speech continues.

The bowels now moved for the first time since eating the seeds, more than twelve hours ago; choraic movement of the hands still continued; as he vomited every time the coffee was administered it was suspended.

7 A.M.—The swelling of the face subsiding; the twitching of the fingers continues; the pupil is dilated as before, and the child cannot tell whether the light is burning or not, though his face is turned to the gas-light; there is now a more distinct utterance, but the voice continues loud; he has no power over his limbs.

Thursday Morning.—The pupil does not respond to the light, though it is now forty hours after taking the stramonium; the twitching of his fingers is much less, and he has considerable fever; he still picks at imaginary objects.

Friday Morning.—The pupil responds better to the light, and the child sees more distinctly; the brilliancy of the eye is less marked; power of the legs is restored; he wishes his playthings, and has more desire for food.

Saturday Morning.—The pupil responds well to the light, though not perfectly. There is some redness of the fauces still remaining, and the child is unusually nervous. In order to give tone to the system the iodide of iron was prescribed.

The points of interest in the case were; 1st, the long continuance of the dilatation of the pupils, viz. from Tuesday evening to Friday morning, and they were not fully restored until Saturday; 2, the picking at imaginary objects, and choraic movements of the upper extremities in marked contrast to the coldness and loss of motion in the lower extremities; 3, the absence of perspiration, and torpor of the bowels; 4, the remarkable expression of the voice, being loud and violent, and his maniacal actions as the effects of the poison supervened, and as they passed away.

A CASE OF POPLITEAL

ANEURISM SUCCESSFULLY TREATED BY PRESSURE APPLIED IN A NOVEL MANNER.

BY T. CLARKSON MOFFAT, M.D.

PHYSICIAN TO THE SEAMAN'S RETREAT.

The treatment of aneurism by compression is deservedly held in increasing estimation among surgeons as compared with all other methods hitherto employed. Involving little or no risk to life it is certainly, wherever practicable, worthy of the most faithful trial, and if unsuccessful, the chances of effecting a cure by the other plans which have been devised, are still as good as before. Any accession to our present stock of information as to the best and easiest mode of securing the exact kind and amount of compression required cannot but be eagerly sought by every surgeon. Having accomplished the obliteration of a large aneurismal tumor of the popliteal artery by a somewhat novel contrivance, I will report the plan in detail, that it may be made tributary in some small degree to the general interests of science and humanity.

The published case of Dr. Fountain, of Davenport, Iowa, in a recent number of the *New York Journal of Medicine*, suggested the method employed, and to that gentleman I cheerfully acknowledge my indebtedness. Nothing can exceed in simplicity the contrivance which Dr. F. made use of in the treatment of his case—nor does it detract from the value of the invention that it was readily suggested to his mind by the position in which he found his patient. The following details of the case which I am about to describe are gathered from notes taken at the time.

On the 22d of March, there came to the Seaman's Retreat, a colored man—a sailor by profession, a native of Pennsylvania, aged 51 years. He had arrived from Calcutta in the previous month, and came to the hospital for the cure of rheumatism, with which he had been considerably afflicted for about eight months. He complained chiefly of

the right knee-joint, which, he said, was very much swollen, especially behind, and for which he had been using a variety of remedies, both internally and locally. He had followed the sea for a great many years, and had been addicted to most of the vices which are common among men of his class. His complexion was that of a dark mulatto. He was about five feet ten inches in height, thick set, broad shouldered, and weighed about 180 pounds. The affection of the knee-joint was of about six months' standing—beginning first as a small tumor between the hamstrings, and gradually increasing without occasioning much inconvenience except stiffness. He attributed the difficulty to a wrench in lifting, at which time he experienced a sensation as of something giving way. He was found, on careful examination, to have a pulsating tumor in the right popliteal space, of the size of a large orange. On consulting with Dr. Isaacs, of Brooklyn, it was decided not to ligate the femoral on account of suspected atheromatous disease, but to try first the effect of compression as devised and successfully practised by Dr. Fountain. In a few minutes, with the aid of a carpenter we erected a structure consisting of a stick of timber about four inches in thickness by eight in width—one end of which was secured to the top of an upright post of the same dimension. This post was fastened firmly to the floor, and lashed to the iron cross-bar at the head of the bed. It was about six feet in height, and bevelled at the top to receive the stick first named; these were firmly nailed together. The large piece of timber about twelve feet in length rested at the lower end upon a strong table, placed at the foot of the bed, thus forming an inclined plane over the bedstead placed lengthwise underneath it. The patient was then placed upon the bed in the supine position, with his leg slightly flexed—somewhat everted—wrapped in thick layers of cotton, and placed in a long fracture-box: a compress made of adhesive plaster wound tightly into a roll, about an inch in length, and three-eighths of an inch in diameter, was then placed upon the femoral at the inferior angle of Scarpa's space. Upon this rested the lower end of a perpendicular piece of wood about an inch square, the upper end of which was bevelled to meet the inclined plane before described.

The pressure was commenced at eight in the morning. The degree of pressure was regulated by drawing the upper end of the perpendicular down the inclined plane, to a greater or less extent as might be required. The hand of the operator was kept upon the stick, and thus secured an equable pressure, even though the patient moved his limb, as he sometimes did a very little. A second compress and upright were placed over the artery as it crosses the horizontal ramus of the pubes, and when the pain from pressure in one was too great to be borne comfortably the other was used, and thus alternately compression was kept up until five in the evening, when pulsation could be no longer felt in the tumor.

The patient complained but little for the first two hours. Three doses of opium were given, which gave him so much ease that he slept somewhat before the operation was completed. Moderate compression was kept up for eight hours longer, after which the patient was kept for several days quietly upon his bed. The tumor, at first very hard and slightly tender, gradually diminished in size; his leg and foot, in which he had experienced benumbing and pricking sensations, gradually regained their natural feeling, and on the 20th of April following he left the Institution perfectly free from any trouble of the joint—with only a small walnut-sized tumor in the popliteal space. We have had no tidings of him since.

The great simplicity of this plan of compression, which is always available, must be palpable to every one. That it is far easier for the patient, and unspeakably more so for the operator, cannot be questioned. It would also seem reasonable to infer that the compression itself, made at but one point, is more uniform and certain than has yet been secured by any other method.

SEAMAN'S RETREAT, STATEN ISLAND, July 2, 1900.

Reports of Hospitals.

NEW YORK HOSPITAL.

COMPOUND FRACTURE OF FIBULA—GANGRENE—AMPUTATION OF THIGH.

[Reported by ALEXANDER T. BELL, M.D., Resident Surgeon.]

A YOUNG German was admitted, June 9th, suffering from a compound fracture of the fibula of left leg, together with extensive lacerations of the soft parts. The accident occurred twenty-four hours prior to admission, and was caused by the crowding together of two rail-cars. As soon as the injury was received the lacerations were brought together by a continuous suture, and the limb tightly bandaged at the seat of injury to restrain hemorrhage. There was found, on admission, a compound fracture of the fibula, about two inches below the head of the bone. The foot and leg below the bandage were much discolored and very cold, there was no pulsation in either of the tibial arteries, and emphysema was present over nearly the whole leg. The thigh was somewhat swollen and contused. The bandage and sutures were at once removed, the limb was swathed in flannel saturated with warm turpentine, and internal stimulants were given. The attending surgeon, Dr. Watson, was sent for, and on arrival determined to await further developments.

On the day following the existence of gangrene of the leg was unmistakable. The odor became very offensive, and the emphysema was fast extending up the thigh. A consultation was called at 2 P. M., when it was decided to amputate through the lower third of the thigh. The patient was brought under the influence of ether, and the operation performed by Dr. Watson. Very little blood was lost. The stump was then dressed as follows:—a roller bandage was applied from above downwards to expel the air, which had infiltrated the cellular tissue; the edges of the wound were then closely approximated by strips of adhesive plaster, and water dressings applied. After the operation the pulse was 120 and feeble. As soon as the effect of the ether had passed off $\frac{3}{4}$ ss brandy was given with Sol. sulph. Magend. gtt. xv., and stimulants ordered to be repeated as occasion required.

The patient progressed favorably until the fourth day after the operation, when he had a slight attack of delirium, which, however, subsided after the administration of an anodyne. The dressings were removed at this time for the first, when the face of the stump was found to be slightly sloughy. The pulse ranged from 120 to 130 per minute. In the course of the next three or four days an abscess formed in the left groin, and was opened. Nothing worthy of note occurred until the 21st, the eleventh day after the operation, when the patient was seized with a chill lasting an hour, and at night had a furious attack of delirium. These symptoms were repeated for the next three or four days, at the end of which time death took place.

At the autopsy, made twenty-four hours after death, purulent matter was detected intermingled with the clot in the external saphena vein. The internal coat of that vein, and the others in the vicinity, gave evidences of inflammation as high up as the external iliac.

ACUTE MENINGITIS—RECOVERY.

[Reported by JOHN C. AGNEW, M.D., Senior Assistant.]

Alexander McC—, aged 25, a native of Ireland, was admitted in the service of Dr. Griscom on the 11th of April. The patient at the time was delirious, and of course unable to give any account of himself. Lying upon the bed he would roll his head uneasily to and fro upon the pillow. His face was flushed, and there was considerable febrile action present, the pulse being 120 per minute. The pupils were widely dilated but regular, the conjunctivæ were much congested, and besides there was a tendency to

strabismus, with more or less constant rolling of the eyeballs. The surface of the tongue was dry and brown, with sordes upon the teeth and lips. The respiration was occasionally sighing. He had some jactitation of the body, with more or less rigidity of the muscles of the lower extremities. No petechiæ were noticed upon his abdomen. The previous history of the case, as far as it could be ascertained from his friends, was in substance this:—The patient had always been temperate in his habits, and was not known to have received any injury of the head that could have given rise to the symptoms described. About two days before admission, without any apparent cause he was seized with a headache, which in the course of the day following became very violent in its character, and was attended with vomiting. Delirium came on that night, and increasing in intensity, he became unconscious the following day. Various domestic remedies were resorted to, but with no good effect. On admission into the hospital the diagnosis made was acute meningitis. A large blister was ordered to the back of the neck, together with the internal administration of calomel in doses of two grains every two hours. In due time the blister established a raw surface. The next day the symptoms of the disease were much more severe than before, and the pulse was 112 and very compressible. A blister was applied behind each ear. A slight amount of pytalism having been produced, the use of the calomel was suspended. That same evening a disposition to somnolency showing itself, about three ounces of blood were taken by cups from each temple, and a turpentine injection was administered. On the following day, being the third after his admission, a marked change for the better showed itself. The jactitation and delirium, which before were very intense, subsided almost entirely, the tongue became moist and showed a clean tip and edges; the temperature of the head and general surface was moderated; the pulse was 72, and there was shown enough intelligence to protrude the tongue when asked so to do. The turpentine had operated very freely. Immediately after ceasing the administration of calomel ten grains of iod. potash were given every six hours. The use of this remedy was continued for four or five days, the dose, however, being decreased one-half towards the last. The remaining history of the disease can be summed up in a few words. The delirium, after a day or two, only showed itself at night and it was not long before it disappeared altogether. The intellect became gradually brighter and brighter, his pulse full, regular, and natural, so that at the end of the seventeenth day after admission, and the nineteenth day from the first symptom of the disease, the patient was discharged perfectly cured.

BELLEVUE HOSPITAL.

THREE CASES OF SPONTANEOUS FRACTURE.

FRACTURES of the bones, from slight or trivial causes, generally called spontaneous fractures, are of such infrequent occurrence that they are always objects of much interest. That they depend upon some abnormal condition of the osseous system induced by a constitutional cachexia is well established. In most instances this predisposing cause is easily traced, while in others it is much more obscure. The following diseases, which impress upon the system a new condition, are supposed to render the bones very liable to fracture, viz. rachitis, scurvy, gout, cancer, and syphilis. Of these affections rickets and cancer, without doubt, have the most decided influence upon the fragility of the bones. It is also true that fractures from slight causes occasionally occur without any apparent cachexia; in these cases local affections of the bones are often detected, but in other instances the predisposing causes are so obscure as to remain undetected. We have recently met in this hospital with three cases of what may be called spontaneous fracture.

The first was the result of the cancerous cachexia. The patient was a female who had submitted to the removal of her right breast about five months before on account of a cancerous growth. She was about forty-five years of age, of robust appearance, and had always enjoyed good health; the tumor was small and perfectly movable; the wound healed kindly, and remained perfectly sound for about four months, when small nodular masses formed along the cicatrix. Several weeks after entering the hospital, in attempting to get into bed she leaned upon her left arm, which fractured near the middle of the os brachii. A few days later, in getting out of bed, her left thigh rested upon the side, the foot hanging to the floor, when the femur also yielded near the middle. She now failed rapidly, and died at the end of a month. No autopsy was made.

In this case the proper dressings were applied, but there was no union of bones.

The second case is still in the hospital (Ward 7), and the treatment has been attended with as good results as that of fractures which have no predisposing cause. The history is taken from the notes of Dr. DE ROSSET, Junior Assist. to the Second Surgical Division—G. R. æt. 33; good constitution, temperate habits, has suffered from neither syphilis nor scrofula, though he has a large, dark cicatrix upon the left ankle, complains only of rheumatic pains in his bones. May 21.—In attempting to pull off his boot from the right foot the leg slightly twisted, when he suddenly felt the thigh yield and heard a snap, but experienced no pain. On entering the hospital the fracture was readily detected a little below the trochanter. The straight splint was applied, and not removed until the end of six weeks, when the fracture was found firmly consolidated with about an inch shortening.

In the first of these cases there can be no doubt that cancer was the predisposing cause of fracture, and of necessity an unfavorable prognosis was given. The failure of the bones to unite in these cases depends upon the cancerous degeneration of the fragments. In the second case, if we exclude syphilis, the evidences of which are noticeable, the cause is much more obscure. We must then refer it to that class of cases mentioned by Malgaigne, where there is local inflammation of the osseous tissue. He says—"I designate thus, by conjecture, an affection manifested generally by dull pains, referred by the patient to a previous contusion, or to an attack of rheumatism; these are rarely severe enough to excite general reaction, and attract little attention, until at last, by slight violence, a fracture is caused at their seat." The successful results of treatment in this case prove the importance of care in the application of dressings in those cases where the cause is obscure. In cases where the constitution is at fault, much may be done by proper internal remedies towards removing the existing evil.

NURSERY AND CHILD'S HOSPITAL.

SPRUE—ESOPHAGITIS.

F. W. — was admitted (service of Dr. GEO. A. PETERS) June 11th, 1859, from the Children's Aid Society, at the age of eighteen days. At the time of admission he had diarrhoea and coryza, his mouth was covered with sprue, and he was much emaciated. He was placed with a wet-nurse and the diarrhoea somewhat abated, but the coryza and sprue remained. Copper-colored spots were discovered around the anus and inside the thighs; he gradually failed, and died of asthenia on the 24th of June.

Autopsy—20 hours after death.—Body greatly emaciated; the patches of sprue were found in the fauces and in the oesophagus, to within half an inch of the stomach; the whole extent of the oesophagus was of a dark red color, evidently inflamed, the inflammation terminating abruptly at the stomach; the oesophagus was still lined by its large pavement epithelia, as shown by the microscope; stomach

healthy; the intestines were not carefully examined, but their external appearance did not indicate disease; mesenteric glands enlarged, and somewhat indurated; lungs, heart, and liver to all appearance healthy; the other viscera were not examined; the patch of sprue nearest the stomach was examined under the microscope and found to contain the branches and sporules of the *oidium albicans*; the hepatic cells contained less than the usual amount of oil globules.

THREE CASES OF PLEURO-PNEUMONIA WITH PULMONARY ABSCESSSES.

The last number of the MEDICAL TIMES contained the records of two cases of pleuro-pneumonia accompanied by small pulmonary abscesses. The three following cases, in which the same lesions were found, render it probable that such abscesses are not of rare occurrence in the pneumonia of infancy. Sometimes, perhaps commonly, the purulent collection is connected with a bronchial tube, and if, in addition, it open into the pleural cavity, pneumo-thorax and collapse of the healthy lung tissue may immediately ensue. It is probable that sudden exacerbation of symptoms, and even sudden death, sometimes occur from this cause.

Case 1. (Under the care of Dr. GEO. A. PETERS).—J. C., æt. four months, was admitted June 19, 1856, with his mother, who nursed him. His health at first was good, but on the 8th of July and 4th of August he had attacks of dysentery, which were relieved. About the time of the last attack, he was noticed to have a slight cough, and a mild expectorant was ordered. After this nothing occurred to attract attention to his case till August 25th, when his breathing became suddenly much oppressed, and his face pallid. Upon examining the chest, the right side was found healthy, but on the left, in the infra-scapular region, there was dulness on percussion, with distinct bronchial respiration. He was treated with squilla, ipecac, and sanguinaria, with the local use of Roche's embrocation and the oiled-silk jacket, but he continued to sink, and died August 30th.

Autopsy.—Right lung and pleura healthy; left pleural cavity contained a turbid serous effusion with clots of blood; near the middle of the lower lobe was a small opening, apparently produced by ulceration, through which a probe could be easily passed; the lung adjacent to this opening was consolidated; in the liver were found rather more than the usual number of oil globules; kidneys healthy; intestines not examined.

Case 2. (Under the care of Dr. GEO. T. ELLIOT).—J. M., four months old, and previously healthy, with the exception of an attack of impetigo, of which he was cured, was seized with a cough Dec. 20, 1858, attended by febrile symptoms. No disease of the chest was detected; tonsils somewhat inflamed. Dec. 22d.—Feverish; countenance anxious; respiration hurried, painful, and accompanied by an expiratory moan; dulness detected at the base of the right lung and pleuro-pneumonia diagnosed. Dec. 23d.—Dulness materially increased, extending to the angle of the scapula; sub-crepitant râle heard over site of dulness. Dec. 24th.—Died since the last record. The treatment has consisted in the use of Dover's powder, syr. of squilla, and syr. ipecac, with counter-irritation and the oiled-silk jacket.

Autopsy.—Right lung adherent anteriorly to the ribs, and about 3 iiiss of sero-purulent fluid in the right pleural cavity, the lower lobe on the same side non-crepitant, and presenting the characteristics of pneumonia, both to the naked eye and under the microscope; under the pleural covering of this lobe were several white points not larger than a pea, containing pus. On attempting to inflate this lobe, the air escaped from two or three perforations which appeared to have communicated with small abscesses; other organs healthy.

Case 3. (Under the care of Dr. WM. W. JONES).—J. D.—aged four and a half months, admitted on the 1st of Feb.; enjoyed good health from the time of admission to the

28th of March; on the evening of this day was fretful, and refused to nurse. Castor oil with a carminative was administered, and after the operation of the oil he appeared improved. March 29th.—Previous symptoms returned, but became more quiet after a warm bath. March 30th.—Head thrown back, respiration slightly labored, though not much accelerated; bronchitis detected on examination. March 31st.—Symptoms the same; an expectorant was ordered, with the oiled-silk jacket, and with counter-irritation by liniment. *sapo. comp.* April 1st.—This afternoon had several mild but well marked convulsions; difficulty of respiration much increased, the head extended, and the eyes turned upwards. April 2d.—Sub-crepitan râles heard over the inferior portion of both lungs posteriorly; pulse 135; resp. 60, and labored; eyes constantly turned upwards, refuses the breast. April 3d.—Mouth and tongue dry and red. April 4th.—Respiration frequent and labored; infra-mammary depression marked on inspiration; pulse 160, small and weak; stimulants freely given. April 5th.—Respiration extremely difficult; a fine sub-crepitan, almost crepitan, râle heard over the lower portion of both lungs; well-marked dullness on percussion in the left infra-scapular region. April 8th.—Died to-day.

Autopsy, five hours after death.—Lower part of both lungs adherent to the ribs, by fibrinous exudation, but easily detached; a considerable portion of the lower lobe on the left side of a dark-red color, and scarcely crepitan; on insufflation, the air escaped through an opening scarcely larger than a knitting needle in the posterior surface of this lobe; the opening communicated with a very small cavity, apparently the site of an abscess; the lung substance adjacent to this cavity almost diffuent, but of the same dark-red color with the more solid part; a portion of the lower lobe of the right lung was of a dark-red color, and feebly crepitan, and the air escaped from an opening in it not larger than that on the left side. The lung substance around the cavity in the lower lobe on the left side, was found to contain pus and exudation corpuscles, in addition to the normal cells.

THE ARMY MEDICAL BOARD.—The Army Medical Board of Examination was convened in New York on the first of May for the purpose of examining Assistant Surgeons for promotion, and such candidates desirous of appointment as should present themselves. The board consisted of Surgeon Clement A. Finley, Surgeon Charles McDougall, and Surgeon John M. Cuyler, Asst. Surgeon John F. Hammond, Recorder. The rigid severity and impartiality of these examinations are well known; and the fact of having passed such an ordeal is more prized by young medical men than the possession of a score of college diplomas. It is but an act of justice to these boards of examination to state that so well are their duties performed in selecting a proper class of young men for army medical service, that the corps not only stands high in public estimation, but is acknowledged by the other officers of the army to be second to no other in the service.

NEW YORK PRISON ASSOCIATION.—The New York Prison Association, a chartered organization, intended especially to watch over the interests of prisoners, discharged convicts, suspected persons, and others involved in criminal relations, presents a report, which shows that during the year 1859, 5,740 persons were visited in our city prisons. As many as 532 complaints, which, on examination, were found frivolous, have been abandoned by its advice, and 551 persons discharged from custody, who were young and inexperienced. Of such cases 579 have been supplied with money and other means, and aided to go to the country or get employment.

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Communications should be addressed "Office American Medical Times, 440 Broadway, N. Y." BAILLIERE BROTHERS, Publishers and Proprietors.

American Medical Times.

SATURDAY, JULY 14, 1860.

THE LATE CHARLES E. ISAACS, M.D.

"DEATH loves a shining mark," and among the well filled ranks of the medical profession in New York and Brooklyn, there probably is not a name more universally respected and beloved than that of the lamented Dr. Isaacs, and it may safely be said that the place and services of none could be more generally missed. Though he had long suffered from the consequences of the malarious and camp exposures of military life, which indirectly induced his fatal illness, that last sickness, and his death, were comparatively sudden and unexpected.

As the entire profession in our cities, and thousands of medical men who have been his pupils or readers, will feel his premature loss as a bereavement to our profession, we have prepared for our readers the following brief sketch of his life and character.

CHAS. EDWARD ISAACS, M.D., was born at Bedford, Westchester county, N. Y., on the 24th of June, 1811. His father was a merchant and farmer. The family consisted of three sons and one daughter, Charles being the youngest. He went to the parish school, where he studied the classics; and at the age of twelve he could read with facility the Greek Testament. He early evinced marked preferences for the natural sciences. The anatomy of insects and the lower animals was carefully studied in a practical way, and he exhibited a peculiar fondness for Botany and Geology. Even at a very early age he was accustomed to saunter away in the fields and woods, gathering specimens of all sorts from the animal, vegetable, and mineral kingdoms. This striking peculiarity early indicated his choice of a profession, and accordingly his tastes were indulged. His father died when he was but seven years of age. He commenced the study of medicine with the late Dr. Belcher, of New York, who was a relative of the family. He graduated in medicine at the University of Maryland, in 1832; after remaining in Baltimore for a short time, he went to North Carolina. During President Jackson's administration he received the appointment of surgeon, to accompany the Cherokee Indians in their removal beyond the Mississippi. He travelled quite extensively among the Indian tribes, and through the Southern States. He entered the

army in 1841; and, of fifty candidates who were examined by the Army Board, only six passed, of whom Dr. I. stood first. He was first sent to Governor's Island, and from thence, after a few months, was ordered to repair to Fort Kent, on the eastern boundary of Maine, in the Aroostook region. There he remained about two years; and from thence was ordered to Copper Harbor, Lake Superior, at the time of the excitement relative to the discovery of copper mines in that region. While at this station *endemic peritonitis* broke out in the garrison, and very few of the soldiers escaped an attack (see N. Y. Journal Med. March, 1846).

Dr. Isaacs left this station in 1845, and from thence went to Fort Niagara, Youngstown, New York. In the spring of 1846, he obtained leave of absence for six months, and during that time resigned his office. He came to the city of New York, and in connexion with a friend, established a medical class in Greene street. At the end of a year he left and returned to Niagara county, again embarking in private practice, but remained only a year; he then came again to this city, and, for a time, held an appointment in hospitals on Staten Island. Subsequently becoming Demonstrator of Anatomy in the College of Physicians and surgeons of New York, he retained this place for several years, and later still became attached to the University Medical College in the same capacity. During the warm season of these years he was employed as surgeon on several European steamers. This gave him opportunities of visiting the hospitals of Paris and other foreign cities, and added new health for the arduous labors of the winter.

Dr. Isaacs continued in this city, always assiduously pursuing his favorite labors in the departments of anatomy and pathological histology—officiating as Demonstrator and Adjunct Professor of Anatomy in the University—and always the ready and reliable expert and counsellor of medical practitioners who required such services as he best could render. In the spring of 1857 Dr. I. took up his residence in Brooklyn, where he at once entered upon a wide and lucrative practice; and where—honored and loved by all who knew him—after a few weeks' illness, he died on the 16th of June.

As an anatomist Dr. I. was not excelled in this country. He was well versed in the practical branches of his profession, and also fond of original investigation in pathology and physiology—in both of which he was an enthusiast. His monograph on the structure and functions of the kidney attracted much attention in this country, and received deserved compliments from eminent men abroad.

Like many men of genius, for a long time monied success was not his. And it really seems doubly hard that when at length he had, in a measure, attained pecuniary ease and worldly comfort he should be so suddenly taken away. He studied and worked for the love of science—personal ambition and selfishness had scarcely a trace in his composition.

With steadfastness of purpose, industry, and more than ordinary knowledge of men and things, he united wit, a genial disposition, and warm, gentle feelings, the possession of which would have done honor to a woman. Even when ill-health and discouragements combined against him, it was astonishing how he would bear up under difficulties calculated to overwhelm ordinary men.

The immediate cause of death was pleuro-pneumonia. He also suffered from Bright's disease of the kidneys, and

for many years had been troubled by repeated returns of malarious difficulties, the result of old exposure at the South.

It was highly gratifying to find the funeral of this lamented brother attended by such a large and respectable number of persons, who manifested unmistakably by their appearance that real, unaffected sorrow had brought them together, to show their respect and affection for the deceased. It was no ordinary funeral, and tears dimmed the sight of numerous eyes that for many a day had not wept. This evidence of general sorrow was a painful consolation to the intimate friends of the departed, and was the more appreciated because strictly unselfish and sincere.

Rare indeed is it that we find a physician who has attained eminence in his profession, of whom we can say when dead—*he left not a single enemy!* and this can be said truly of Charles E. Isaacs. As was remarked by a professional brother, when speaking concerning the late Dr. J. Kearney Rodgers, just after that bereavement, "The profession knew not his value until now that he is gone! A void is left that none can fill." And now there is yet another void! Who can fill it?

Among the friends selected as pall-bearers we noticed one who, although oppressed and with a heavy heart, did not flinch from that last sad duty towards him to whom he had so long been—through success—through adversity, still the same devoted, never failing friend.

We are pleased to hear that a movement is on foot to erect, in Greenwood, a monument to Dr. Isaacs' memory, and if by such means expression could be found for the affectionate regard with which that memory is treasured by the profession, and that will ever be augmenting with the pleasant reminiscences of that generous self-forgetfulness, charity, good-will, and devoted friendship which so remarkably characterized the man, that monument would tower to the skies.

The New York Academy of Medicine, of which Dr. Isaacs was an active and highly esteemed member, has appointed Dr. Wm. H. Van Buren to prepare his memoir. No person could have been selected who has had greater opportunities to learn the true worth, the secret springs of action, the hopes and disappointments of the deceased.

Added to all the pleasant recollections of his medical life and his social virtues, is the assurance that his latter days were filled with the joyous hopes and devout purposes of a Christian. Fame and worldly prosperity, so certainly his if life continued, were not the objects for which he desired to live, but that he might honor God and be of use to his fellow men in his accustomed labors in our profession.

Like Godman, Hope, Golding Bird, and Todd, with whom Dr. Isaacs was worthy of being classed, he engaged in the most recondite and original researches in anatomy, histology, and pathology, and in his latter days illustrated the falsity of the oft-repeated assertion that such studies lead to materialism and infidelity. In conversation with a medical friend respecting the studies and objects of medical life, he calmly remarked, "I am not anxious to live, but I would like to do some good to my fellow men. God's will be done! He is good, and more wonderful than all we have learned here!"

So pass away the lights and laborers of the medical profession. Let us heed the lesson and cherish their memory.

INDEPENDENCE DAY.

HAPPY the citizen of New York who rose on the morning of the 5th of July with a whole skin and unbroken bones. Happy they, whose business calling them into the thoroughfares of the great metropolis, and amid the tempestuous atmosphere of our national Saturnalia, were yet permitted to return home with unbandaged heads and unsplintered limbs. The tutelary deities of storm-tossed mariners perilously venturing between Scylla and Charybdis, or threading the channels of the "roaring Symplegades," must have tenderly gone in the van of every citizen who thus escaped martyrdom by belching fires and raining fragments of rockets. Go where you might, turn where you would, and troops of boys armed cap-a-pie with every possible variety of detonating instrument, thronged the streets, adding their quota of noise and danger to the general uproar around. Collected in groups at the street corners, each vied with his neighbor in audacity of enterprise—overloading cheap, deceitful pistols, whose every discharge threatened the life, and but too often destroyed the limbs of the bystanders, or impertinently thrusting explosive missiles in the faces or under the clothing of the passers-by. Some amused themselves with burning loose gunpowder on the ground, and having converted their pockets into magazines, the latter not unfrequently took fire, and the vagrant patriot suddenly became an unwilling holocaust to the Goddess of Independence Day.

Aside, however, from the indiscreet and rash adventures of noise-loving youths, whose long-collected pennies went to swell the sales of gunpowder and the importation of Chinese fire-crackers, children of larger growth, though apparently of no greater maturity, paraded the streets, occasionally firing muskets and horse-pistols, in close proximity to the passing throngs. To have remonstrated with either boy or man afflicted with this gunpowder-burning mania, would have been to make oneself the special target of his weapons. It was literally "cut and run" the livelong day between all manner of perils; for if the pedestrian escaped being shot by flying wads, or burnt by crackers, or deafened by some overpowering detonation, a frightened horse might suddenly whisk around the corner, and render him instantly and unawares a proper subject for a stretcher and the surgical ward of a neighboring hospital. The indiscriminate warfare carried on throughout the day by "insatiate archers," lovers of liberty, and despoilers of other men's peace, was appropriately concluded at night with the usual hailstorm of rocket sticks, so that he who congratulated himself at sunset upon the possession of a whole skin, might still go to bed with a lacerated scalp and a very respectable perforation in his skull. Indeed, never did the Roman Saturnalia present scenes so dangerous to life, as did the streets of New York on the Fourth of July, for in all directions you saw unbridled license of deportment, and wanton dangers boldly thrust across the pathways of safety and legal protection.

We do not think it necessary to ask whether patriotism is either produced or nourished by such scenes as these, because, whatever name we give them, they are still only exhibitions of a raging popular delirium assuming a most dangerous type, and against such society has a right to demand and to exact protection for its members. It is the best test of a high civilization to accord the largest possible liberty to the masses, and at the same time to secure the

utmost possible safety to every individual. If scores of rowdies can, under the pretence of celebrating our national anniversary, assume the possession and control of our city, so that the lives and limbs of its citizens are not safe within its precincts, then the city is no longer a proper place of residence. If gentlemen cannot walk the streets in safety, and must watch their houses to protect them against the pseudo-accidental incendiarism of that day, then of what service is our police? Better at once disband the force, and convert their salary-fund to some better use. We pay taxes in order to be protected as well on the Fourth of July as on any other day, and the city Government has no right to ignore the safety of the citizen on that day any more than on any other.

It is gratifying to know that we have an instance in this country of a large city, which provides both for the *entertainment and protection* of its citizens, on our national holiday. We commend the example of the good city of Boston, whose authorities not only arrange an appropriate programme of performances, but likewise protect the citizen in the streets against risks to life by fireworks or firearms, and protect also the *sick in their beds* against the noise which might imperil life or health:—

CITY OF BOSTON.

TO THE PUBLIC.

In order that the citizens of Boston may be the better prepared to enjoy the festivities of the celebration of our National Independence, and to participate more fully in the *liberal arrangements* made by the City Government, it is respectfully requested that all good citizens, especially parents and guardians, will co-operate with the municipal authorities in keeping order on the night preceding the celebration. An extra Police force will be on duty for that purpose, and especially to prevent the discharge of *pistols or other firearms, crackers, squibs, mock processions, blowing of horns*, and all similar annoyances.

Persons having cases of sickness in their families requiring especial attention, are requested to give notice at the Station Houses in their respective Police Districts, or to the Chief of Police, City Hall.

Per order of the Mayor,

DANIEL J. COBURN, Chief of Police.

Is this not worthy of imitation? The dignity and the character of every city require that nothing less than this should be done to satisfy the principle of personal security, which is at the foundation of all human society.

But there is still another reason why the use of firearms and fireworks of every description should be forbidden in our streets. Those noisy patriots are always, to a greater or less extent, the martyrs to their own vapid patriotism. Our hospitals are crowded on the 4th of July with the victims of accidents which ought never to have happened, which would not have happened if proper ordinances were enacted and enforced, prohibiting the indiscriminate firing of guns and pistols, and the discharge of squibs and rockets in our streets. In an economic point of view the Hospital fund is charged with what the Police fund is responsible for, and a noble public charity is thereby unnecessarily depleted. Is this right? Should a man or any number of men be allowed, for the simple, empty gratification of making noise on the 4th of July, to render himself a burthen upon the city? And the poor sick in their homes, ought not their excited nerves and aching heads to be protected against the wanton noises in the street below? Is this mercy, or is it not simply *justice*—justice to all?

We subjoin a list of the casualties, as copied from the returns of the police, which occurred on the 4th of July, 1860, in the city of New York. Many a well-fought battle of the Revolution did not give as large a list of gunshot wounds. And yet we are only surprised that it is so small, when we recollect that for twenty-four hours the free and unrestrained use and abuse of firearms and dangerously explosive missiles was not only allowed to vagrant boys and thoughtless children, but even encouraged in our streets, which at that time were crowded with a strolling multitude. The danger to life and limb could hardly have been greater, had the city been bombarded for the same length of time by a besieging army. This record of casualties deserves the serious consideration of every person who desires for himself and friends rational amusement on public holidays:—

R. Ellia, pistol-shot wound of head; J. Thompson, set. 13, finger shot off; W. Dunham, pistol-shot wound of leg; Ann Hart, pistol-shot wound of arm; W. T. Schultz, set. 12, burned by powder; W. Rich, set. 11, bursting of powder-flask; F. Perrin, set. 12, bursting of powder-flask; J. Brady, pistol-shot wound of the face; A. Elker, boy, pistol-shot wound of hand; J. Dunlap, shot by a small cannon; A. Nicker, boy, pistol-shot wound of forehead; D. Macnamara, pistol-shot wound of both thighs; Lena March, woman, pistol-shot wound of head; W. Robbins, burned with powder; J. Miller, injured in a riot; S. Thompson, pistol-shot, two fingers blown off; T. Lane, boy, pistol-explosion, hand injured; E. Baker, pistol-shot wound of hands; J. Carter, pistol-shot wound of fingers; T. Mehan, pistol-shot wound of hand; S. H. Lake, boy, burned by powder; F. Purdy, face and hands burned by B. fluid; P. F. Brophy, fall, cutting forehead; L. E. Hersheim, gun-shot wound of hand; E. Flynn, contused wound of head; F. Miles, concussion of brain; Z. Zenhan, burned with powder; W. Murphy, mashed toes; M. Kelly, fall from a plank; J. Dilworth, gun-shot wound of hand; C. Razier, gun-shot wound of hand; J. Judge, pistol-shot wound of eye; J. Cluffy, stabs of head; E. McLoughlin, cut forehead from slung-shot; R. Prime, pistol-shot wound of hand; R. O'Donnell, wound of eye; T. Care, stab of arm; M. Smith, scalp wound; J. R. Wesner, hand partially shot off by a pistol; J. McKenzie, hand badly shot; E. McKeever, set. 16, gun-shot wound; Jane Kelly, fracture of the ribs; Catharine O'Brien, severely beaten; E. Note, stab in back and arm; Mrs. Hughes, fracture of jaw; M. Tellyallen, killed by a fall; S. Brown, stabbed; E. E. Conklin, stabbed; W. Zanitz, gun-shot wound of hand; F. Crosly, pistol-shot wound of hand; F. Gilbert, premature discharge of cannon; J. Donnelly, premature discharge of cannon; J. Welch, premature discharge of cannon.

TOTAL, FIFTY-THREE.

Our of 190 presentments made by the grand jury of Kings county, at their recent session, a majority were against unlicensed dramsellers. The jury also presented the retail liquor business generally "as demoralizing and the fruitful source of crime." They urge the strict enforcement of the law against unlicensed liquor sellers, and plainly intimate their opinion that facility of licence is a great evil. In concluding their presentment, they add:

"In our judgment and from our experience, a great portion of crime, in all its phases, and of every nature, has been, and is, superinduced by the use of intoxicating liquors."

Reviews.

HÆMORRHOIDS AND PROLAPSUS OF THE RECTUM; THEIR PATHOLOGY AND TREATMENT; WITH ESPECIAL REFERENCE TO THE APPLICATION OF NITRIC ACID. By HENRY SMITH, F.R.C.S., Surgeon to the Westminster General Dispensary, &c. Second Edition. London: John Churchill. 1860. pp. 108.

THIS little volume derives its chief interest from the earnest advocacy by the author of the method of treating hæmorrhoids by the application of nitric acid. The late Dr. Houston, of Dublin, proposed this treatment more than fifteen years ago, and although it found an advocate in Mr. Ferguson and others, it has never been generally adopted. This is not, however, a universal remedy, and the practitioner has to discriminate in his selection of cases to which the ligature and the acid are specifically applicable. The author says:

"I have stated, whilst describing the nature of internal hæmorrhoidal diseases, that the condition in which they are found varies. I have endeavored to point out those cases to which the operation of the ligature is applicable, and have stated that this practice is necessary and justifiable in those instances where the tumors are large, mainly composed of tissues in which the veins predominate, and have become indurated. There are, however, other instances where the hæmorrhoidal tumors are small or moderate in size, and where they are evidently composed of morbid texture, in which the small arteries rather than the veins are interested, as shown by their bright florid aspect, and their tendency to pour out arterial blood whenever the patient is at the closet, or when the tumors are handled. These tumors are generally not very prominent. They produce exceeding annoyance, and indeed, prove more destructive to the health, as they generally yield a great deal of blood. Now, in such cases, the ligature will undoubtedly be as effective as in the other instances before described; but this proceeding is not necessary, as the local use of the nitric acid is so eminently suited to them. The relief which one single application of the acid gives in these cases is remarkable, and an excellent cure may be effected, if the whole of the diseased texture be subject to its action.

"About this particular kind of cases, there is no doubt in the mind of any surgeon who has seen the nitric acid applied in a proper manner. There is, however, a mixed class of cases where the remedy is an uncertain one, but in which, nevertheless, the surgeon is justified in trying it, and where I sometimes have succeeded when I little expected it. I refer to those cases where there is a hæmorrhoidal mass, consisting perhaps of one tumor, mainly composed of venous ramifications, and of a bluish color, with one or more presenting the characters of the florid sessile pile; or one portion of the tumor or tumors may present the dark blue appearance and thickened membrane, and another portion of it may be brightly vascular, have its mucous cover granular and slightly ulcerated. In this kind of mixed case, I do not hesitate to try the acid if the patient is particularly desirous, but I make a point of stating that it is impossible to depend upon any curative action in such, although in some instances the remedy has acted most efficiently.

"To apply the agent to those cases where the tumors are large and indurated, and have a deep blue color, would be perfectly useless, and only bring discredit upon the nitric acid as a means of cure in other kinds of hæmorrhoidal disease. I particularly wish to point this out, as it is very probable that some of my brethren think that I am an enthusiast with regard to the use of this remedy, and

recommend it too strongly. On the contrary, I always urge upon the patient the necessity and propriety of the ligature in such, and even in the more doubtful cases just alluded to. It is not necessary, because a surgeon may have reason to adopt, with confidence, a particular kind of remedy, that he should be an enthusiast, or should be blind to the value of those other means which are generally recognised as suitable and efficient.

"It is, however, in that class of cases not unfrequently met with, where there is not so much any decided hæmorrhoidal tumor, but where there is a generally congested and relaxed condition of the mucous membrane of the rectum, attended with bleeding to a greater or less extent, that the nitric acid acts so beneficially. Dr. Houston has compared this condition of the rectum not inaptly to that of the thickened conjunctiva after long continued ophthalmia. The application of the acid to the diseased points from which the bleeding proceeds, will soon remedy all the bad symptoms."

The method of applying the acid is thus described:

"There are certain details connected with the application of this agent which require attention. Thus, the acid which is used should be the strongest and purest which can be obtained. I have generally employed the colorless acid, but sometimes I have thought it desirable to use the brown *fuming* nitrous acid, which acts more energetically. I have used for the most part a piece of wood as the means of carrying the acid on to the part, but some object to it as liable to be acted upon by the agent, and therefore recommend a glass rod or brush, both of which suffice very well, but I do not think it much matters.

"It is important to touch the part only lightly, especially in those cases of vascular piles where bleeding easily takes place; for the blood escaping and mixing with the acid, will in a measure neutralize its effects. I also lay great stress upon the necessity of wiping the diseased part with lint, previous to applying the acid, for there is always a certain amount of mucus covering these tumors, and unless this be removed, the nitric acid will not act efficiently.

"I have recommended that the diseased parts should be brought down either by the action of an enema, or by the efforts of the patient sitting over warm water; but there are cases where it will be difficult and unpleasant to effect this object in either way, and in this case I adopt the plan recommended many years since by Mr. Ferguson, of using a silvered glass speculum, by the introduction of which a good view of the hæmorrhoidal tumor may be had, and the nitric acid can be readily applied to the part through the instrument, into the eye of which the diseased tissue is by a little management easily engaged.

"How often will it be necessary to apply the acid? The answer to this question will depend upon the nature of each case. Where there is only one vascular tumor, or a limited amount of disease, one application, pretty freely made, will suffice; but in cases where there are several tumors, or points of disease, as many operations will be needful."

The degree of pain which follows these applications is far less than when the acid is applied to the skin, generally amounting to slight smarting or warmth, which soon subsides. A large number of clinical cases are appended.

The second portion of the work is on Prolapsus of the Rectum. In addition to the old methods of treatment by excision and ligature of the depending folds of mucous membrane, the author recommends in certain cases the nitric acid. In old cases of prolapsus, where the mucous membrane is very much thickened and changed in its structure, the acid will do little or no good. The cases to which it is adapted are those where "there are one or more large folds of mucous membrane continually down, and where the tissue is extremely vascular, presenting the appearance of smooth velvet, or is perhaps superficially ulcerated."

CONTRIBUTIONS TO OPERATIVE SURGERY AND SURGICAL PATHOLOGY. By J. M. CARNOCHAN, Professor of Surgery in the New York Medical College. With Illustrations drawn from nature. Philadelphia: Lindsay & Blakiston. 1860.

The third part of Professor Carnochan's work contains the following: Congenital Dislocations of the Head of the Femur; Anatomical Observations on Congenital Dislocations of the Head of the Femur; on Restoration of the entire Upper Lip, with cases. The author's views on these several subjects have already been presented to the profession. The illustrations of this number are of the highest order, and the typography surpasses that of any contemporary medical publication.

ON THE DISEASES, INJURIES, AND MALFORMATIONS OF THE RECTUM AND ANUS: with Remarks on Habitual Constipation. By T. J. ASHTON, Surgeon to the Blenheim Dispensary, etc., etc. Third Edition. London, Churchill; and Philadelphia, Blanchard & Lea. 1860.

The present edition of this excellent work has been carefully revised by the author, and new illustrations added. We have regarded this work from its first appearance as the most complete monograph on the subject to which it is devoted.

LECTURES ON THE DISEASES OF INFANCY AND CHILDHOOD. By CHARLES WEST, M.D., Physician to the Hospital for Sick Children, etc., etc. Third American, from the Fourth Revised and Enlarged London Edition. Philadelphia: Blanchard & Lea. 1860. pp. 630.

Two editions of this work have been called for in England since the appearance of the last American edition, both of which were carefully revised by the author. The edition before us combines therefore all the improvements made in the foreign editions, and in addition contains two admirable lectures by the author, more recently delivered. The first is on *Sudden Death in Infancy and Childhood*; the second is on *Cerebral Symptoms Independent of Cerebral Disease*.

ASYLUM FOR IDIOTS IN KENTUCKY.—This Institution is commenced under the most favorable auspices. An act of the last Legislature provides \$20,000, to commence the erection of a building for its use. It also provides liberally for its going into operation immediately, in buildings temporarily hired for that purpose. The new institution is to be located at or in the vicinity of Frankfort.

THE MEDICAL COLLEGE OF VIRGINIA.—Richmond has received the munificent donation of \$30,000 from the Legislature of that State, with which the faculty are multiplying their illustrations in every department, erecting a commodious hospital, and otherwise increasing their facilities for instruction.

PRIZE AWARDED.—The Prize offered by Dr. Cyrus A. Alexander, through the State Medical Society of North Carolina, for the best Essay "On the Use of Tobacco, and its injurious Effects upon the Human System," has been awarded to Dr. J. T. Shaffner, of Salem, N.C.

HONORARY.—Daniel Ayres, M.D., of Brooklyn, in acknowledgement of his recent and successful operation of extrophy of the urinary bladder, has been elected corresponding member of Obstetrical Society of Berlin.

Progress of Medical Science.

INFANTILE PATHOLOGY AND THERAPEUTICS.

By A. JACOBI, M.D.

On the Ophthalmia of newly-born Infants. By DR. FORTOUL. (*Quelques Considérations sur l'Ophthalmie des Enfants Nouveaux-Nés*, Dijon, 1858).—Dr. Fortoul, alluding to the mortality of infants affected with ophthalmia, considers this fact to be more than a mere coincidence, as he has found that, though the consecutive lesions of the ocular membranes are rare, there are frequently alterations existing in other organs, especially in the digestive and in the skin. His attention has been particularly called to the resemblance of the symptoms occurring during ophthalmia, and those of muguet. Artificial lactation favors the occurrence of ophthalmia, but infants nursing females affected with specific diseases are in greater danger than any others. Two-thirds of Dr. F.'s patients died, generally from intestinal or pulmonary inflammation; muguet was a frequent complication. One in every twenty had consecutive lesions of the ocular membranes, none of whom recovered. Ophthalmia was generally noticed for the first time on the fifth or sixth day after birth, frequently on the fourth, very rarely on the eighth. The only diseases complicating the ophthalmia were those mentioned, but there was frequently a disposition to sclerema and cerebral inflammations. Those comparatively rare cases, produced by direct contact of syphilitic and gonorrhoeal matter, were extremely severe, while the spontaneous or sporadic cases were of less local danger, but exhibited a great disposition to other affections of the system. *Treatment:* Dr. F. lays the greatest stress on the regulation of the diet and temperature; avoids local bleeding and purgatives; carefully cleanses the diseased eye by pouring water into it from a sponge, not by injections; recommends the application of a solution of nitrate of silver, one part to forty of water; seldom uses a strong solution of one to two and a half, and very rarely the solid caustic. In syphilitic cases he uses mercury externally, being fearful of its internal use, from its irritant effect on the intestinal mucous membrane. In conclusion, he alludes to livid spots and ulcerations of the skin not unfrequently met with during its course.

Croup without Croupous Cough. By DR. GOTTSCHALK. (*Jour. f. Kinderk.* 1866, 1 and 2).—The peculiar "barking" cough well known as a symptom of both membranous croup and laryngeal catarrh, is by no means a pathognomonic symptom of croup. Hitherto, however, it appears to have been met with in every case of true membranous laryngitis. Dr. Gottschalk reports two cases of this disease in which false membranes were the only obstacles to free respiration, and yet the peculiar cough alluded to was not at any time present. The diagnosis was confirmed by the post-mortem examination. There may be cases, therefore, of genuine croup without the presence of the "barking" cough.

On the Effect of some Medicinal Agents on False Membranes. By DR. HERMANN. (*Jour. f. Kind.* 1860, 3 and 4).—The experiments made by Barthéz, Millard, Ozanam, and others, concerning the solubility of false membranes in some medicinal agents, are well known to our readers. Dr. Hermann, of St. Petersburg, Russia, has made experiments on a large number of chemical agents and solutions from which he concludes:—1. *Agents having little or no effect on false membranes:*—Sulph. ether, absol. alcohol, tinct. iod., solutio nitr. arg., sesquichlor. iron, liq. sod. caust., and liq. potass. caust. The exudation did not undergo any material change from these agents, but some produced a moderate effect on the subjacent mucous membrane. Iodine and sesquichlor. iron changed the color of the membrane without altering its

elements; the iron rendered it more solid and tough; nitrate of silver in solution simply covered the membrane with, and compressed it by, a stratum of silver; bichromate of potassa acted like chromic acid, rendering the membrane more solid and fragile without altering its tissue. 2. *Agents with some solvent or rather destroying effect:*—Concentrated mineral acids; in a slight degree diluted acids; acetic acid had almost no effect. 3. *Agents dissolving some elements of the membrane, others being left unaltered:*—Chloride of potassium and liq. ammon. caust. destroy the nuclei of the cells, leaving the fibrine unaltered, but in loose connexion; bromate of potassa and iodide of potassium dissolve the fibrine without altering, in their substance, the nuclei. 4. *Agents dissolving the whole membrane, leaving no remnant:*—Ammoniated copper; a few cases of pharyngeal membranes, in which it was used, appeared to do well under its repeated local applications.

Investigations on Diphtheria and Croup, made during an Epidemic at the Children's Hospital in 1858. By DR. PETER. (*Quelques Recherches sur la Diphthérie et sur le Croup, faites à l'Occasion d'une Epidémie observée à l'Hôpital des Enfants en 1858.* Paris.)—Dr. Peter has given particular attention to the subject of diphtheria, his interest in the disease leading him to make experiments as to its inoculability on his own person. From his elaborate little work we take the following conclusions:—Scarlatina and diphtheria may coexist in one individual and modify each other. In such a case the scarlatinous eruption is of an erythematous nature, sometimes without any ultimate desquamation, but not at all dependent on the diphtheritic affection; every eruption observed in diphtheria is considered by Dr. P. to be scarlatina. Epidemics of diphtheria generally begin and end with benign cases, sometimes with cases of mere erysipelous pharyngitis, while the malignant cases are generally observed during the most intense development of the epidemic. This difference as to severity does not include any difference as to the nature of the affection. The contagiousness of diphtheria has been proved by its propagation in the same bed; from bed to bed; from one side of the ward to the other; its propagation amongst patients confined to their beds more often than among those who occasionally left them; its easy communication through the whole number of members of a family. The duration of incubation varies from two to fifteen days, but in the majority of cases from two to eight days. Patients affected with diphtheria ought therefore to be isolated, and no children allowed to come near them (as children are most apt to be affected) until the symptoms have disappeared for fifteen days. The attempts at inoculation made by Dr. Peter upon himself failed, as have all others, hence inoculation is either improbable or very difficult to accomplish. Nor would inoculation prove a preventative, as diphtheria has a very great tendency to return. Diphtheritic affections generally have been observed more frequently in girls than in boys; laryngeal diphtheritis (croup) alone being a little more frequent in boys. The largest number of cases of croup have been observed in the course of the third year as well in boys as in girls. Tracheotomy has been successful in one-third of the operations on boys, one in 3 7-10th operations on girls; in no case has it been successful where the patients were under two and a half years old; the majority of successful operations were performed on boys of from 4 to 6 years, and on girls of from 4 to 5 years of age; season did not appear to exert any influence on the mortality of cases operated upon; all the children of two or two and a half years who were operated upon, appeared to die from the violence of traumatic fever. The maximum of successful operations did not correspond with the maximum of the frequency of croup. The comparison of the mortality from either pharyngeal or laryngeal (croup) diphtheritis shows abundantly that the disease destroys more patients by its effect upon the blood than by suffocation. The amount of exudation does not indicate the severity of the disease, as fatal cases will frequently show but few and small membranes. Finally, there is no intrinsic difference between the diphtheritic mem-

branes of the pharynx and those of the larynx (membranous croup).

Description of a Simple Instrument for inflating the Lungs of Infants born in an Asphyxiated State, with Remarks. Glasgow, 1860.—Dr. Wilson, after alluding to the unsafe proceeding of inflating the lungs by applying the mouth directly to the child's mouth, etc., describes an instrument intended to remedy the defects of other instruments and methods. It consists essentially of a vulcanized india-rubber ball, about the size of an orange, to which is attached a German-silver tube about six inches long and gently curved towards its free extremity; the tube is closed at the extreme end, but has two openings or eyes, like a female catheter, a short distance from the point. On compressing the ball the contained air rushes along the tube and through the openings above-mentioned, and on removing the pressure the ball rapidly expands and becomes instantly refilled with air, which may again be evacuated as before. On introducing the tube into the larynx, and acting in this manner, it is obvious that for the most part the same air would be used over and over again, which would be a manifest disadvantage and a decided objection. This, however, may be easily remedied by making another opening in the tube, about an inch from its attachment to the ball, for the free ingress of fresh air. During the compression of the ball the left thumb will easily cover the opening, which must, however, be removed to admit the free entrance of pure air during the subsequent expansion of the ball, this opening being somewhat larger than the other two, and being much nearer the ball readily permits the entrance of fresh air.

New Treatment of Croup and Diphtheritic Angina. By Drs. DESMARTIS and BOUCHÉ DE VITRAY, (*Nouveau Trailement du Croup et des Angines Couennenses.* Paris, 1860.—The principal point in Drs. Desmartis and Bouché de Vitray's new treatment of croup, is the administration of emetic doses, one or more, of the turpeth mineral (yellow sulphate of mercury), which, they assert, has saved even the most desperate cases; ipecac internally, and general baths with mustard were also often resorted to, and stimulant beverages given. The number of cases of croup and pharyngeal diphtheria reported is twelve. This number is too small to determine the value of the remedy. We may add that this treatment is not new, as Dr. Hubbard, of Maine, administered the same agent for the same purpose before, and our readers will remember the case of croup treated successfully with turpeth mineral, which Dr. Watson reported at a recent meeting of the New York Academy of Medicine. (*Amer. Med. Times*).

Mutilation of the Fœtus in Utero by Pathological Bands. By Dr. CRÉDÉ (*De Fœtus in Utero Mutilatione Filis Membranisque Pathologicis effecta.* Leipsic, 1858).—Prof. Crédé reports a new case of mutilation during foetal life, from pathological filaments; the mutilated part being the middle finger of the right hand, in a foetus of five months. After reviewing the cases of Schaeffer, Montgomery, Zagorski, Smith (Charles Bleeck), Mankiewicz, Simpson, Dubois, Gustavus Braun, Levert, Gustavus and Charles Braun, and Friedinger, he advocates the opinion of Montgomery, Simpson, Scanzoni, and Simonart as to their origin. Montgomery considers these filaments plastic exudations, similar to those consequent on inflammations of all the serous membranes of the organism. The serous amniotic membrane, like the pericardium, peritoneum, and pleura, may produce similar filaments extending from the foetus to the amnion, from the umbilical funis to the foetus, and connecting several parts of the foetal organism. In the beginning of foetal involution the cutis is very much like serous membrane, and genuine epidermis is formed at a later period. As those filaments are probably formed at a very early period of foetal life, it is but natural that sometimes part of them should look like serous membrane, part like cutis; nor is it positively necessary that other signs of inflammation should always be found, as the plastic power is extremely great during foetal life.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, MAY 9TH, 1860.

E. KRACKOWITZER, M.D., President, in the Chair.

HYPERTROPHIED HEART.

Dr. AUSTIN FLINT presented a specimen of hypertrophied heart, which he thought to be of considerable interest in connexion with the history of the case, which was briefly this:

The patient was a man fifty-six years of age, who had always enjoyed robust health, and was accustomed to considerable muscular exercise. He had never had rheumatism, nor any acute affection of the chest.

In the early part of the last winter, on being very much excited by anger, he was suddenly seized with a great sense of suffocation, and a feeling of impending dissolution. Together with this, there was a marked lividity of the face, the extremities became cold, and he coughed up a certain amount of bloody froth.

At his request venesection was performed by some one, and in the course of half an hour he experienced complete relief, only suffering from the sense of weakness occasioned by the loss of a very considerable amount of blood. After this, until the paroxysm in which life was terminated, he had four other similar attacks, each characterized by the same symptoms, only in a less marked degree; but in none of them did he experience any pain.

When Dr. F. saw him, two days before his death, he appeared perfectly well, and presented no rational symptom referable to disease of the heart. He was only annoyed with the apprehension that some one of the attacks might prove fatal. The Doctor gave the chest a cursory examination, with the following result:

The apex of the heart beat in the seventh intercostal space, in a vertical line with the nipple. There was also an impulse in the fourth and sixth intercostal spaces. There was some heaving of the præcordium. Auscultation detected the existence at the base of the organ of a soft diastolic murmur, which was quite loud, and more or less diffused over the whole præcordial region. Over a limited spot at the apex a murmur was heard, which either slightly preceded or accompanied the first part of the systole.

Death took place on the 7th instant, in one of the paroxysms, which lasted some fifteen minutes.

At the post-mortem examination, the heart was found to be hypertrophied, weighing 16½ ounces. The enlargement was chiefly limited to the left ventricle, and was for the most part due to increased thickness of the walls, which, at the thickest part, measured five-sixths of an inch. The lining membrane of the aorta was very much roughened by atheromatous deposit, which, however, had not undergone the calcareous degeneration. The vessel was increased in size, measuring, just above the valves, four inches. The valves appeared to be sound, somewhat thickened, perhaps, but not deformed. The mitral orifice presented nothing abnormal, except that at the base of the valvular curtains, looking from the auricle, a few very small bead-like excrescences were seen, not much larger than the head of a pin. The heart was the only organ removed. There was a small amount of effusion in the left pleural sac, while the right lung was bound by old adhesions.

ENLARGEMENT OF THE HEART.

Dr. FLINT presented a second specimen of enlargement of the heart, which he thought would be of interest in connexion with the first one.

The specimen was taken, the day before, from a man 66 years of age, who first came under observation on the

23d of April, at the Dispensary of the Long Island College Hospital. The patient stated that he had suffered from rheumatism about a year before, but it was not ascertained whether it was inflammatory or not in its character. About the 1st of Jan. he began to suffer from dyspnoea on exercise. This condition of things increasing, he soon became unable to follow his trade, which was that of a carpenter; and at the time he presented himself for treatment he was unable to work at all. At that time the dyspnoea was so severe, that he was obliged to sit up the greater part of the night.

On examination of the chest, it was evident that the heart was enlarged. The impulse of the apex was felt in the sixth intercostal space, about an inch or inch and a half to the left of a vertical line drawn through the nipple. There was no heaving of the præcordium, neither was there any murmur recognisable.

A short time after he came under notice there was an entire loss of appetite, and he was compelled to keep his bed. Previous to his death gangrene attacked both of the great toes.

The heart weighed eighteen ounces. The enlargement consisted for the most part in dilatation of the left cavity. The aorta was somewhat enlarged, its internal coat was deeply stained, and was the seat of atheromatous deposit. The valves were not diseased.

Both lungs at their apices and dependent portions were congested.

Dr. DALTON asked what was the particular lesion or condition of the heart in the first case, that could account for the occurrence of the paroxysms and sudden death.

Dr. FLINT stated that the symptoms which presented themselves led him to suppose that there was mitral contraction, but at the autopsy he found that such was not the case, and he was forced to the conclusion that, in consequence of the aortic regurgitation, the left ventricle became overdistended, and thus induced the paroxysms by causing pulmonary congestion. The symptoms were very like those in angina pectoris, with the exception that pain was not present; and in angina, said he, the pain does not bring about death, but an unknown something superadded to the pain.

Dr. FINNELL stated that those who were in the habit of examining cases for the coroner, where sudden death had taken place, very seldom failed to find some lesion about the heart; but such lesions varied very much from each other, even where death occurred in the same manner. In some there was merely a little atheromatous deposit found in the aorta; in other instances, some one of the valves might be found to be diseased, or the organ itself be simply hypertrophied. He stated that he was in the habit of referring the cause of death to the heart, where such a state of things could not be accounted for by lesions in any other organ of the body.

Dr. GOULEY asked if there was anything in the condition of the heart that could account for the gangrene of the toes, and whether such a state of things was not brought about either by detached vegetations from the free margins of the valves, or from clots which had become organized in the heart, being carried in the current of the blood, to block up some of the smaller arteries of the extremities.

Dr. FLINT stated that the cavity of the right ventricle contained a colorless clot, about the size of a pullet's egg, which was closely intertwined with the tendinous cords.

POISONING BY CYANIDE OF POTASSIUM.

Dr. FINNELL presented a stomach taken from a German who had committed suicide by a dose of cyanide of potassium. The post-mortem examination was made by Drs. Gallagher and Bouton. The stomach contained a considerable quantity of bloody mucus. The mucous surface of the organ was of an intense bright red color, and was covered more or less with effused blood.

He stated that it was the third case he had presented,

and in all the red color of the mucous membrane, as in this one, was more marked than in any other kind of poisoning. It was not known how soon after taking the poison his death ensued, inasmuch as the body was found in bed. In one of the other two cases death took place in two or three minutes; in the second, in twenty minutes.

In answer to a question from Dr. Minor, he stated that the appearances were the same as those presented in rum stomach, only in a more marked degree.

Dr. MINOR asked if the death was not somewhat analogous to that produced by hydrocyanic acid.

Dr. FINNELL stated that in poisoning from hydrocyanic acid no redness of the mucous membrane existed.

Dr. KRACKOWITZER did not think that death was induced by gastric irritation, but by paralysis of the nervous system; and that the redness was post-mortem, the result of a chemical action upon the blood in the vessels.

Dr. DALTON remarked that the cyanide of potassium of itself was very irritating, and that but a small proportion of the salt was decomposed to form the hydrocyanic acid which produced death.

MEDULLARY TUMOR OF THE BREAST.

Dr. FOSTER SWIFT presented a medullary tumor of the breast which had been removed, along with part of the gland, by Dr. Parker, from a lady forty years of age. About three months before the operation, she first noticed a tumor of the breast, about the size of a walnut. From that time it increased quite rapidly, so that at its removal it had doubled its former size. It was then very mobile, the veins were quite distinct over its most prominent portion, notwithstanding the skin was not at all thinned. The glands in the axilla were not enlarged.

On microscopic examination it was found to consist mainly of free nuclei, and a few cells imbedded in a granular base.

He presented the specimen on account of the rarity of its situation. He stated that Paget had met with but four such cases, and Lawrence had seen only two. This variety of tumor affecting the breast was, however, far more common in this country; about one-fifth of the number being of that character.

AMERICAN MEDICAL ASSOCIATION.

SECTION ON SURGERY.

THE surgical section of the American Medical Association held a meeting at New Haven on the afternoon of June 6th, 1860. Dr. DIXI CROSBY, of New Hampshire, was elected chairman.

Dr. LEWIS A. SAYRE of New York, as chairman of the committee appointed at the last meeting of the Association to report on *Morbus Coxarius, and the Surgical Pathology of Articular Inflammations generally*, stated that he had prepared a paper referring only to the first branch of the subject, preferring to leave the rest for a future time.

The present report embraced the pathology, causes, and symptoms of the disease, together with the history of many cases in detail illustrative of the plan, and principles proposed in the treatment of its various stages. Also, a complete collection, in tabulated form, of every case of exsection that had been performed up to the present time—many of which had not been before reported—with a brief history of the same, including the age, sex, cause, condition, time, and mode of treatment; and the result, with the name of the operator, with mention of the record for reference. Also, a full and minute description and engraving of a new instrument, devised by him, for the mechanical treatment of this disease in its earlier stages;

an explanation of the principles upon which it was constructed, its mode of application, and result of the treatment illustrated by cases, and photographic drawings taken from life.

The disease was divided into three stages—first, second, and third. In the first stage, local depletion was advised, together with the removal of all pressure from the synovial surfaces, by means of the instrument referred to. Issues and setons were ignored, and the reasons given therefor. In the second stage, when the effusion was very great and showed no signs of being absorbed by ordinary means, puncture was insisted upon, to be followed by the application of the splint. Cases were cited to show the propriety and harmlessness of this practice if properly performed, not only as a means of relieving the patient, but of arriving at a diagnosis. He maintained that the advantage thus gained by opening the joint was more than counterbalanced by any after risk.

In the third stage, when the synovial membrane was destroyed, the cartilage of incrustation eroded, and there were positive evidences of bony crepitus present, the operation of *exsection* was strongly urged.

If such an operation were performed before the acetabulum had become perforated and the system exhausted by hectic fever, there was every prospect of a final recovery; and that within a very few months, with but very slight deformity, and almost perfect motion. Various examples of the benefit of such treatment were given in detail, and the report closed with a tabular review of seventy-two cases of *exsection* of this joint. Of these operations fifty-eight were performed for caries; forty-four recovered with more or less perfect motion, and the remaining fourteen died; seven from exhaustion, the acetabulum being perforated and the system being broken down by gangrene; two from psoas abscess; three from insufficient removal of the disease; one from fracture; and in one the cause of death was not stated. Of the remaining fourteen operations eleven were performed for gun-shot wounds, only two recovering; one for fracture; and in the other two the reason for operating was not stated.

Dr. KRACKOWITZER, of N. Y., asked wherein the splint mentioned differed from the one known as Dr. Davis's, and which of the two had been first in use?

Dr. SAYRE, in reply, stated that he had seen Dr. DAVIS's splint before his own was manufactured, and had expressed to that gentleman his disapprobation of the means used for extension, and that he (Dr. S.) had afterwards set to work to construct one that answered, as he thought, the purposes better. He further remarked, that in Dr. DAVIS's splint there was, in place of the ratchet and cog, a simple hinge arrangement, which was incapable of regulating extension. This he considered a very important point to be looked after, inasmuch as a child would grow fully three or four inches every year, and it was necessary, when the instrument was worn for any considerable length of time, that the means of extension should be so regulated as to meet all the requirements of the case. Dr. S. maintained that in his modification this principle was fully carried out.

Dr. CROSBY remarked, that the subject of the treatment of hip-joint disease was a very interesting one to him, more particularly that part of it which referred to the opening of the joint. He thought that the proper time of performing such an operation was a matter well worth discussing.

Dr. SAYRE, in this connexion, stated, that if the joint was fully distended so as to give the peculiar deformity referred to in the second stage of the disease, where the limb was apparently lengthened, flexed, abducted, and everted, and with no signs of the disappearance of the effusion, he would puncture the joint and afterwards apply the splint. The earlier such an operation was performed the better it was for the patient. If, on the other hand, there was good reason to suppose the existence of sero-purulent matter in the joint, as shown by the long con-

tinuance of the disease, general emaciation of the patient, and hectic, a free incision should be resorted to, taking care that no pouch be left.

Dr. MUSSY, of Ohio, asked Dr. Sayre what was the guide for making the puncture.

Dr. SAYRE stated that the puncture was made just behind and above the trochanter major; the depth at which the instrument entered varied with the amount of fat deposited in the sub-tegumentary tissue. In answer to a question from Dr. Atlee, Dr. S. remarked that if the character of the fluid was found after puncture to be sero-purulent, the puncture would be converted into a free incision; if it was then found that the disease had progressed still farther, that the bone had been left bare, all that remained to be done was *exsection* of the diseased portion. The after treatment consisted in keeping any resulting inflammation in check.

Dr. CROSBY stated, that in a case in which he performed puncture, he first made an incision through the skin, and areolar tissue behind the trochanter down to the muscle; then separating the fibres of the same with a director, he ascertained, by the motion of the instrument, the extent of the distension. A trocar was introduced, and synovia and pus escaping, the incision was enlarged in the same manner as referred to by Dr. Sayre. The case treated in this way recovered in a surprisingly short space of time, the patient walking about three months after the incision was made. After the operation, all that remained to be done was to approximate the edges of the wound by adhesive straps, the lower portion being kept open by the introduction of a tent.

Dr. HYDE asked Dr. Sayre's experience in reference to the opening of other joints.

Dr. SAYRE replied, that he had opened the ankle and elbow joints repeatedly; had followed the same general principle, and had obtained like good results. In reference to the treatment of the early stage of the disease, Dr. Sayre stated that Dr. March, of Albany, had some years before constructed a splint for the purpose of keeping the parts at rest, and preventing any friction or undue pressure of the two inflamed synovial surfaces upon each other. He believed that Dr. M. was the first one who advocated that plan of treatment, and he desired very much to hear that gentleman's experience.

Dr. ALDEN MARCH, of Albany, next made in substance the following remarks:—It is true, a few years ago, I brought this subject before this association, and Dr. Sayre has given a faithful account of the views that I entertained at that time. The principle of treatment applied more especially to the early stages of the disease, and consisted in keeping the parts in a state of quiescence and in removing all undue pressure. As long ago as the days of Dr. Physic of Philadelphia, a splint was employed in the treatment of this disease. His (Dr. P.'s) idea was simply to prevent motion of the parts, without extension or counter-extension. In 1839, Dr. Wm. Harris published, in the *Philadelphia Medical Examiner*, four cases of morbus coxarius, treated by himself, with extension and counter-extension; but made no allusion to the pathological condition of the joint structures involved upon which he founded his treatment. My attention was directed to the investigation of the pathological condition of the most common and destructive form of hip disease as early as the year 1845 or '46. At the session of this Association held in Boston, 1849, at the office of Prof. J. B. S. Jackson, and in his presence, together with some twenty-five or thirty other distinguished surgeons and pathologists, I exhibited several specimens of morbus coxarius, and endeavored to explain the destructive process of this terrible disease. Where two inflamed surfaces rub upon each other, or where undue pressure is made on the tender and inflamed parts, and continued for some time, necrosis and more or less destruction of the joint is pretty sure to follow. The only way to remedy such evil effects was to remove the cause by taking off the pressure. To this end I constructed a rude

apparatus, and brought it before the Association at its session in New York, 1853. It consisted simply of a long splint, broader above than below, to which a foot-piece was attached, and a perineal and circular strap or belt. This long outside splint extended from the sole of the foot to a point on the side nearly opposite to the nipple; and at the part opposite to the trochanter major, there was a fenestrum or opening by which all lateral pressure was removed from that projecting point of bone, and consequently from the acetabulum. In regard to the results of this plan of treatment, I find them fully corroborated by the experience of Drs. Sayre and Davis.

But to go further; with regard to the operative part—to the opening of the hip-joint, I must confess I have had very little experience. I have two specimens in my museum of heads of femurs which were necrosed, and were worked out spontaneously. In both instances the patients recovered, and, I believe, are still living, in the enjoyment of good health. I have opened the ankle, knee, and elbow-joints not unfrequently; but I do not remember to have opened the hip-joint more than twice. In one instance, I failed to reach the effusion; but, in process of time, the necrosed bone worked through the opening made; that young man is now alive, and in good health. The mother, at the time of the operation, thought I was too cruel, and in a few days sent for another physician in the neighborhood, who said that I was mistaken in my diagnosis, and that it was nothing but a case of rheumatism.

He stated, in conclusion, that when his apparatus was first brought forward, he was pretty severely criticised in reference to the supposed ill effects from confinement.

In Dr. Sayre's apparatus, this confinement, after the acute character of the disease had subsided, was unnecessary, and it was consequently more desirable on that account, as a valuable means of cure. He was glad to see efforts made to improve the treatment of a disease so common, and heretofore so destructive to limb, if not to life; and, if he had been the humble agent in directing the attention of the profession to its mechanical treatment, on true *pathological* and *philosophical* principles, he felt as though he had not in vain devoted many studious hours to this interesting and important subject.

Dr. HUBBARD, of New Hampshire, stated that he had a case of hip-disease which had been managed upon what he considered the conservative principle, where the abscess was allowed to burst. The patient was afterwards placed upon March's Splint for three months and a half. As the result of that treatment, the inflammation subsided, and the general health of the patient very much improved, so much so, that it was very desirable to get him up and about. Just at that time Dr. Sayre's report came to hand, and it struck Dr. H. that it was just the instrument that was applicable to that case. Accordingly he sent a measure, and was soon supplied with the apparatus. The splint was first applied in the afternoon with a slight amount of extension, which was increased the following morning. On the following morning, the patient's clothes were put on him, and he was assisted to walk to the window and sit in a chair, where, at the time of making this report, he still remained. The child is some six or seven years of age, and in testimony of the good effects of the treatment, desired Dr. H. to return his sincere thanks to Dr. Sayre for his instrument. The speaker expressed himself as entirely satisfied with the result of the case, and intended at the very first opportunity again to test the advantages of the instrument.

(To be continued.)

GAS LEAKAGE NUISANCE.—It is reckoned that about 386,000,000 of cubic feet of gas escape per annum in the metropolis—or, in other words, that about 1,000,000 cubic feet a day of that delicious vapor is let loose in an unburned state upon London society. Some authorities reckon the quantity at about 2,000,000 feet per diem. The loss in hard cash comes up to about £50,000 per annum.—*Med. Times and Gazette.*

Obituary.

DEATH OF ROBERT RAY, JR., M.D.

THE death of Dr. Ray is felt by a large circle of professional friends with unusual depth of sorrow. It is not only the loss of a young man, but of one of rare endowments, and favored with every facility for bringing his talents into effective service.

He was an alumnus of Columbia College; and upon receiving the degree of Doctor in Medicine from the College of Physicians and Surgeons, his inaugural thesis upon Hospital Gangrene, a careful record of an epidemic which then raged in the New York Hospital, was requested for publication. He entered the service of the New York Hospital, and, after finishing his term as House-Surgeon, was appointed Curator of the Hospital Museum. Zealous in the advancement of scientific medicine, he prepared a catalogue of the Museum which will be a valued memento of his professional ardor. His industry was untiring, his manners of exceeding modesty, his judgment prompt and sagacious. Possessed of fortune, his charity will be remembered by many who were its recipients and sole witnesses. Christian faith was the basis of his virtues, and many mourn that one so loved, so favored, and so devoted, should be taken from them, and from the profession he adorned.

Medical News.

APPOINTMENTS.

BELLEVUE HOSPITAL.—B. A. Segur, of Ct., and Chas. H. Covill, of Ct., as Junior Assistant Physicians to fill vacancies occasioned by resignation.

ST. LUKE'S HOSPITAL, NEW YORK.—WILLIAM B. CASEY, M.D., Physician, in place of Dr. T. G. THOMAS, resigned.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF PENNSYLVANIA.—WILLIAM PEPPER, M.D., of Philadelphia, to the chair of Theory and Practice, vacated by Prof. Geo. B. Wood.

HOWARD HOSPITAL, PHILA.—S. W. GROSS, M.D., to the department of Diseases of the Genito-Urinary Organs; and CHARLES NEFF, M.D., to the department of General Surgery, in place of Dr. S. W. GROSS, resigned.

UNIVERSITY OF MARYLAND.—EDWARD WARREN, M.D., of Edenton, N.C., Editor of the "Medical Journal" of North Carolina, to the chair of Materia Medica, vacated by Prof. CHARLES FRICKE, deceased.

REGISTRAR, KY.—S. M. BEMISS, M.D., of Louisville, Editor "Louisville Medical Journal," Registrar of Kentucky.

IDiot ASYLUM, KY.—JAMES RODMAN, M.D., to the Superintendency of the new institution for idiots in the State of Kentucky.

ARMY AND NAVY MEDICAL INTELLIGENCE.

THE ARMY MEDICAL BOARD will assemble at Baltimore on the 20th of September, for the examination of assistant-surgeons for promotion, or of such candidates for appointment for the medical staff of the army as may be invited to present themselves. There are now three vacancies in the grade of assistant-surgeons.

THE NAVAL MEDICAL BOARD, recently convened at Philadelphia, recommended for Assistant-Surgeons:—1. JAMES E. LINDSAY, N.C.; 2. HENRY F. McSHERRY, Va.; 3. JOHN J. GIBSON, Ill.; 4. OSBORN S. INGLEHART, Md.; 5. SAMUEL J. JONES, Penn.; 6. ROBERT R. GIBBES, S.C.; 7. JOSEPH W. SHIVELY, O.

The following gentlemen, Assistant-Surgeons, were found qualified for promotion:—Daniel B. Conrad, James Laws,

Francis L. Galt, John S. Kitchen, Albert L. Gihon, John Vansant, Edward R. Denby, William M. Page.

THE ARMY MEDICAL BOARD OF EXAMINERS, recently convened in New York, recommended the following gentlemen for admission into the Army as Assistant-Surgeons:—WEBSTER, Mass.; JOHN VANSANT, U.S. Navy; W. A. M. FAUNTLEROY, Va.; C. C. BYRNE, Fla.

THE NEW YORK PATHOLOGICAL SOCIETY has adjourned to the 12th of September.

WILLIAM LANGSHAW, M.D., of East Cambridge, Mass., has joined the Arctic Expedition of Dr. Hayes, as Surgeon and Naturalist.

HENRY WENTWORTH ACKLAND, M.D., Regius Professor of Medicine, and Clinical Professor in the University of Oxford, is Physician to the Prince of Wales, and will accompany him on his tour in this country.

DIPHTHERIA is prevailing in Homer, Cortland Co., N. Y. The number of deaths having as yet, amounted to three, all of which occurred in the practice of irregulars.

PHILADELPHIA BOARD OF HEALTH.—Dr. Paul B. Goddard, has been elected President, and Dr. James McLeran, Secretary of this Body.

PHILADELPHIA HOSPITAL.—Dr. S. D. Gross was elected President, and Dr. J. L. Ludlow, Secretary, by the Medical Board of this Hospital, at its recent annual meeting.

MISSIONARY TO THE NESTORIANS.—Frank H. Young, M.D., late of Berkshire Medical College, has been appointed to the Nestorian Mission, and will sail early in July from Boston, to assume his duties as a Medical Missionary.

UNIVERSITY MEDICAL COLLEGE.—This institution during the past winter had a class of 420 students, and at its spring commencement graduated 138. We are gratified to announce that the large number of southern students, who annually patronise this school of medicine, were in no way affected by the *stampede* which occurred in Philadelphia.

A SECOND MEDICAL SCHOOL IN BROOKLYN.—During the last session of the New York State Legislature, a charter was granted to the *Brooklyn Medical and Surgical Institute*, for the purpose of establishing and maintaining an Infirmary and Medical College, with power also to grant the degree of Doctor in Medicine.

THE MEDICAL DEPARTMENT OF THE BAKER UNIVERSITY, is the name of a new medical school reported to have been organized at Leavenworth city—with the following professorships and faculty:—Descriptive and Surgical Anatomy, J. F. Smith, M.D.; Theory and Practice of Medicine, —; Principles and Practice of Surgery, M. S. Thomas, M.D.; *Materia Medica* and Therapeutics, H. Griffin, M.D.; Chemistry and Toxicology, T. Sinks, M.D.; Institutes of Medicine, W. Booth Smith, M.D.; Medical Jurisprudence and Sanitary Science, G. W. Hogeboom, M.D.; Clinical and Operative Surgery, J. L. Weaner, M.D.; Clinical Medicine, C. J. Lee, M.D.; Obstetrics, C. A. Logan, M.D.

MIDDLE GEORGIA MEDICAL COLLEGE, the fifth medical school in that State, was recently organized with the following faculty:—Anatomy, L. L. Saunders, M.D.; Surgery, John T. Banks, M.D.; *Materia Medica* and Therapeutics, R. B. Gardner, M.D.; Medical Jurisprudence, S. H. Saunders, M.D.; Physiology and Pathological Anatomy, F. O. Dannelly, M.D.; Medical Chemistry, L. J. Robert, A.M., M.D.; Institutes and Practice of Med., E. F. Knott, M.D.; Obstetrics, T. M. Darnall, M.D.; Diseases of Women and Children, M. J. Daniel, M.D.

UNIVERSITY OF VIRGINIA.—The following gentlemen graduated in Medicine at the present session: B. B. Hunter, Texas; R. P. Page, Clarke; W. H. Peck, Hampton; N. M. Read, Henry; A. E. Slaughter, Culpepper; J. B. Stoval, North Carolina; W. P. Thurman, Bedford; J. R. Ward, Lynchburg; W. R. Wilson, North Carolina.

AMERICA need not be dependent any longer on foreign discoveries. Why should the young country always have to be reading accounts of what the old ones have done and are doing, instead of cutting out a career and immortality for itself? Let American booksellers be made to pay, and

let American authors and original researchers flourish! So say we also. There are good hearts and sound minds, steady observers and eloquent writers in the land of our children; and we wish for nothing more than that they should have fair play in the race, and speedily outstrip their fathers, if they can, in the work of doing good to man kind.—*Med. Times and Gazette*.

SANITARY OPERATIONS OF THE POLICE.—The so-called Sanitary Squad of the N. Y. Police make the following report for the quarter ending June 28, 1860:—Sinks reported as being full, 1,872; Filthy tenement houses, 1,376; Unsafe houses, 88; Unsafe stoops, 10; Unsafe sinks, 57; Filthy slaughter houses, 30; Total, 3,433. Sinks cleaned by order of the department, 1,142; Sinks cleaned by City Inspector, by order of department, 730; Total, 1,872; Filthy tenement houses cleaned by owner, by order of Department, 1,187; Filthy tenement houses cleaned by contractor, by order of Department, 189; Total, 1,376; The majority of unsafe houses have been repaired, and the remainder are undergoing repairs, 88; Unsafe stoops repaired by order of Department, 10; Unsafe sinks repaired by order of Department, 57; Slaughter houses cleaned by order of Department, 30; Total, 3,433.

HEALTH OF NEW YORK FOR THE WEEK ENDING JULY 7, 1860.

Summary of Deaths—Men, 91; women, 73; boys, 141; girls, 126. Males, 232; females, 199. Colored persons, 5. Total, 431. Corresponding week of 1858, 442, decrease 11; of 1859, 457, decrease 26. Among the causes of death we notice:—Cholera Infantum, 55; Convulsions, Infantile, 40; Croup, 7; Diarrhoea, 7; Diphtherite, 2; Dysentery, 7; Fever, Scarlet, 23; Hooping Cough, 4; Inflammation of Lungs, 21; Measles, 5; Small Pox, 4; Sun Stroke, 1; Consumption, 64; Dropsy in the Head, 20; Marasmus, Infantile, 22. *Recapitulation*: Bones, Joints, &c., 2; Brain and Nerves, 108; Generative Organs, 8; Heart and Blood Vessels, 14; Lungs, Throat, &c., 107; Old Age, 4; Skin, &c., and Eruptive Fevers, 34; Premature Birth, 3; Stomach, Bowels, and other Digestive Organs, 118; Uncertain Seat and General Fevers, 33. Total, 431, of which 33 were from violent causes. *Ages*: Under 2 years, 210; 90 and upwards, 6. *Public Institutions*: Alms House, Blackwell's Island, 5; Bellevue Hospital, 19; City Hospital, 3; City Prisons, 1; Colored Home Hospital, 2; Island Hospital, 3; Lunatic Asylum, Blackwell's Island, 2; Lunatic Asylum, Bloomingdale, 1; Nursery and Child's Hospital, 2; Randall's Island Nursery Hospital, 1; St. Luke's Hospital, 2; Ward's Island Emigrant Hospital, 7. Total, 48.

DEATHS.

RAY.—July 3, at Saratoga Springs, ROBERT RAY, M.D., of New York, in the 28th year of his age.

MEDICAL DIARY OF THE WEEK.

Monday, July 16.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Elliot, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, July 17.	{ BELLEVUE, Medicine, Dr. Thomas, half-past 1 P.M. CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M.
Wednesday, July 18.	{ ACADEMY OF MEDICINE, 8 P.M. EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Sayre, half-past 1 P.M.
Thursday, July 19.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Loemia, half-past 1 P.M.
Friday, July 20.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, July 21.	{ BELLEVUE, Surgery, Dr. Church, half-past 1 P.M.ish, 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past EYE INFIRMARY, Diseases of Ear, 12 M.

Original Lectures.

CLINICAL LECTURE ON

"PERINEAL SECTION" AND SYME'S OPERATION OF EXTERNAL URETHROTOMY.

DELIVERED AT THE NEW YORK HOSPITAL.

BY THOMAS M. MARKOE, M.D.,

ATTENDING SURGEON.

I have asked you to meet me in the theatre to-day, gentlemen, because, during the past few months, you have seen in the wards a number of cases of operation for stricture and its consequences, to which I wished to direct your attention, as it were "en resumé." These operations are of two different kinds, each having different indications, and having a different surgical significance, and to these differences, as well as to their points of resemblance, I have thought that our study this morning might be profitably directed.

No surgeon who has had much experience in the management of strictures can fail to have encountered some cases which were entirely rebellious to treatment. The reasons of this intractability I do not now propose to dwell upon; but the fact is one fully recognised by practical men, that there are a certain number of strictures which will not yield to dilatation, caustics, or internal incision, or if they do so yield, it is only for a time, the disease returning in all its severity as soon as active treatment is laid aside. Still further these cases are, of course, liable to become complicated with any of the various accidents to which stricture patients are exposed; and to a stricture thus rebellious to all treatment, we may have superadded, a retention of urine, a perineal abscess, or an extravasation of urine, which adds to a case already difficult, an element of serious danger to life.

It is not wonderful that surgeons, in such cases, have been led to look to the knife to extricate their patients from so serious a condition. Accordingly we find that two hundred years ago, there is a record of a case, in which despairing of relief from ordinary plans of treatment, the surgeon was induced to puncture the bladder through the perineum, to release his patient from impending death. Many other isolated cases are scattered over the records up to the present time, but the cutting operation through the perineum for the relief and cure of stricture, can hardly be regarded as a recognised operation until the present century. I do not know that any particular name is associated with this operation as its inventor, nor indeed that any of the great men who have employed it claim to have perfected its details. It seems to have gradually forced itself on the profession, as a resource in certain otherwise desperate cases; and has always been looked upon as an undesirable, an unsatisfactory, and uncertain, though sometimes a necessary surgical expedient. Perhaps in glancing thus at the history of the operation, the name of John Hunter should not be omitted, he being one of the earliest English surgeons who countenanced or practised it. He first operated by opening the urethra behind the stricture, and pushing a trocar through the contracted portion to meet his opening behind. This operation which, of course, can have but a limited application, he afterwards extended to the usual incisions in perineo. Since his time most of the great surgeons have resorted to the operation, and most of the distinguished writers have given it a place in their works as an accepted surgical expedient.

The operation is technically called the *perineal section*, and I may as well here define what is meant by that term. It is applied to those cases, in which the surgeon, not being able to pass any instrument through the urethra, into the bladder, has therefore no guide in cutting through the stric-

ture, but his knowledge of the anatomical relations of the parts. This is also called the *boutonnrière*, or button-hole operation, by the French writers, because the incisions make a sort of button hole between the skin of the perineum and the urethra.

Having thus glanced at the nature of the operation and its history, let me ask your attention to the cases in which its performance is indicated. In the first place, then, I would premise that, by its very definition, it is confined to those cases in which an instrument cannot be passed through the stricture. I do not propose, at this point, to enter into any discussion of the question of the impermeability of strictures. It is sufficient for our purpose, that there are many cases in which, at the time of operation, an instrument cannot be made to pass; and it is this which makes the distinction between the perineal section, and another operation, in which the stricture is divided on a guide, previously passed through it, which latter procedure is a modern proposal, and as it was introduced by Mr. Syme of Edinburgh, has been called by his name. In order to contrast more strikingly these two operations, I have written this table, which is intended to show the different circumstances which, in the various forms of stricture, indicate one or the other as the most proper to be performed.

PERINEAL SECTION.

1. Retention of Urine.
2. Extravasation of Urine.
3. Perineal Fistula.
4. Impassable stricture.

SYME'S OPERATION.

1. Contractile stricture.
2. Irritable urethra.
3. Extensive stricture.
4. Traumatic stricture.

1st. *Retention of Urine* complicating a close stricture is a very common circumstance, and can generally be relieved by appropriate general remedies, together with careful and gentle use of small bougies, as you saw us do in Rat's case, who was the last one before us in this condition. Sometimes, however, we do not succeed in procuring relief, and the over-distended bladder demands immediate emptying. In this emergency we have several courses open to us. We may tap the bladder through an incision made above the pubes; we may tap it more safely and more conveniently, by a long curved trocar introduced through the rectum after the method so ably advocated by Mr. Cook of the St. Bartholomews Hospital; or lastly, we may perform the perineal section, in doing which we may most commonly have the satisfaction of curing at the same time the retention and the stricture. The hope of obtaining this double result makes this operation eminently suitable in most of these cases, and it was for this condition that most of the earlier operations of perineal section were performed; and I may mention in passing, that cases of retention are generally easier to manage by this operation, because the urethra, distended behind the stricture by the accumulated urine, offers a sort of guide in searching for the track into the bladder, which is entirely wanting when the operation is performed for other conditions.

2d. *Extravasation of Urine*.—This accident, as you know, demands in all cases, and as promptly as possible, deep and free incisions into the parts which are invaded by the urine. Now, as in most instances it is the perineum which is the seat of the effusion, we have again a double indication for performing the perineal section, inasmuch as the incision we make for the purpose of reaching the stricture is serviceable in giving vent to the extravasated urine. This unfortunate accident is one which very frequently demands operative interference, because the inflammation and swelling which the urine causes in the tissues outside of the urethra, are apt to close up the passage of a close stricture, so that no instrument can be got through, and an operation without a guide is our only resource. I said that the operation when performed for retention was comparatively easy; when performed for extravasation, on the other hand, it is often, from the confusion of parts and tissues, by the inflammation and sloughing, produced by the contact of the urine, a blind groping, in which the only thing we have to guide us is our know-

ledge of the position which the urethra ought to occupy in relation to the bony prominences in its neighborhood.

3d. Perineal Fistula.—The very existence of these fistulæ indicates a grave and advanced degree of stricture, and a condition of parts unfavorable to cure by ordinary methods. Still further, these fistulæ themselves require the same treatment which fistulæ are so apt to require in other parts of the body, viz. an incision which shall lay them open freely towards the nearest natural surface. The operation therefore of perineal section seems particularly indicated in these cases, and, in fact, I very much doubt whether dilatation of the stricture, be it ever so complete, would often be successful in healing up the perineal fistulæ, particularly if they were old and numerous.

4th. Impassable Stricture.—If we have a case which is absolutely impassable, then it is evident that the perineal section is our only resource. With regard to this matter of impassable strictures, there has been a vast deal of unnecessary controversy. Probably some of you can remember, a few years ago, how severely Mr. Syme was handled on both sides of the Atlantic, for having asserted, as it was said, that there was no such thing as an impermeable stricture. Now, in fact, Mr. Syme never did say that there was no such thing as an impassable stricture, but he made some pretty strong expressions as to its extreme rarity in his own practice, which subsequent experience obliged him to explain and to modify. The controversy which thus originated was nevertheless bitter and acrimonious in the extreme, but it has had one good effect; it has made men watch and sift their experience with great care, and it has thus brought out the great fact, which is the one of practical importance to us, that where we have time to wait and where there is no morbid irritability of the urethra, we can, by patient, careful, and repeated efforts, finally succeed in introducing an instrument, through the closest strictures, in so large a proportion of cases, as to show that Mr. Syme was not far wrong in the strong statements which he originally made on this subject. Making all due allowance for this fact, however, I do contend that, in actual practice, we occasionally meet with cases where, from want of time or from other causes, we cannot introduce any instrument to serve as a guide for our incisions. I do not now allude to those rare cases where, from traumatic causes, the canal is entirely obliterated. In all these cases, therefore, of impassable stricture, where the condition of things is such that delay would be hazardous, the perineal section is indicated.

To these four, perhaps I should add another class of cases indicating this operation, viz. those in which false passages exist, which turn aside the point of our instrument, be it large or small, so that we are unable to find the opening of the urethra, which, if it could be found, would perhaps be large enough to receive a good-sized instrument. A very large proportion of the cases of close stricture received in this institution, are complicated with false passages. Unskilful persons, and those not accustomed to appreciate the amount of force which the urethral membrane will bear, are exceedingly apt, in their anxiety to surmount the obstruction which they encounter, to use such a degree of pressure with the point of the instrument, as to force it through the mucous membrane of the canal, into the areolar tissue outside. This tissue being loose and lacerable, allows the instrument to travel through it without much difficulty, and the operator, finding that he has passed the point of obstruction, congratulates himself that he has got his instrument through the stricture, and does not discover his mistake, until the end of the catheter is stopped by coming in contact with the prostate gland, or the side of the bladder, and no water flows through it. This accident certainly is due, in most instances, to want of skill or want of care and gentleness on the part of the operator; but, gentlemen, let me caution you not to imagine that, with all the skill and knowledge you may possess, you may not yourself do the very thing which we are condemning. You must remember that the mucous membrane around a stricture is apt to be more or less softened from inflammation, and that in this

condition a very slight pressure, particularly with the point of a small metallic instrument, will perforate the softened membrane, and we may thus, any of us, produce a false passage when we little expect it, and with a degree of force which we did not suppose sufficient to cause the mischief. The true safeguard against this accident is to have the possibility of its occurrence always before you, and this will generate a care, and deliberation, and delicacy, in your manipulations, which, if you have a proper knowledge of the anatomy of parts you are working on, will pretty certainly preserve you from the apprehended danger. For myself, so great do I regard the risk of inflicting injury on the urethra by the use of small silver or steel instruments, that I have for years abandoned their use almost entirely, and now depend upon the flexible bougies and catheters, in all cases of close stricture, during the earliest stages of treatment, when small pointed instruments are necessarily used. I am happy to say that in using the fine conical instruments made by the French I have had every reason to be satisfied, and I believe this would be the testimony of most of my colleagues in this Hospital.

Having thus glanced briefly at the classes of cases which require the operation of perineal section, let me now give you an account of the operation itself. The perineum being shaved and cleansed, and the bowels well evacuated, the operation is generally best performed with a bladder moderately full of urine, the flow of which may serve in some degree as a guide to the end of the urethra in the wound, and be the evidence on the completion of the operation, that we have reached the bladder with our instruments. A full-sized grooved staff should be passed down to the stricture, and held by an assistant steadily against it. An incision should now be made along the median line of the perineum, and its position and extent regulated by the depth of perineum and the situation of the stricture. We cut carefully in the median line, because you know no large vessels cross that line, and we therefore avoid, in a great degree, the danger of hemorrhage. Having carried our incision down to the staff which can be felt in the urethra, this canal is to be opened a little in front of the stricture, by an opening which should be large enough to give you a full view of the interior of the mucous canal, and, if possible, of the anterior face of the stricture. In order to get this full view of the stricture, it is necessary to have the cut edges of the open urethra drawn forwards towards the surface, and at the same time drawn apart, so as to open the wound as wide as may be. This may be done by fine hooks, or more conveniently by threads passed by a curved needle through the cut edges of the urethra. These threads, which you saw me use in the case of White, are very convenient, are not in the way of your instruments, and very much facilitate the further steps of the operation. Having opened the urethra, one of two conditions may present itself. *First*, in a certain number of cases having the anterior face of the stricture directly under the eye, we can succeed in passing a probe or director through the stricture; or *second*, with all care we may not be able to introduce the smallest instrument past the obstruction. If the first condition obtains, and we are fortunate enough to get anything through the stricture, the further steps of the operation are simple and easy enough. We have only to divide the constricted portion of the urethra on this instrument, and the cutting part of the operation is done. If, on the other hand, we cannot get any instrument to pass, and I am sorry to say that it is the most common condition of these cases, we have to work along with a small pointed sharp knife in the direction of the urethra, cutting as little as may be, and constantly searching with a probe for the urethra behind the stricture. And here, gentlemen, commences the difficulty of the operation. You can easily see that at best it is a groping in the dark, and when the parts are thickened and altered by inflammation there is no operation in surgery more tedious or more difficult. If the strictured part of the canal is short, and the surrounding parts not much diseased, by a little careful dissection we can usually divide the stric-

ture and reach the sound urethra behind it, and this is much facilitated by the urine pressing forward and distending the canal. But if the strictured part be extensive, and the surrounding parts much altered, then it must be acknowledged there can be no certainty or precision in the dissection. It is truly an exploring expedition, and the most important qualification for it is an inexhaustible stock of patient perseverance. Sometimes the knife wanders by the side of the stricture and reaches the urethra beyond without having divided the stricture at all. This we cannot always appreciate in the altered condition of the tissues, and we may think ourselves fortunate if we have made a short and direct communication between the two divisions of the urethra, and whether we have laid open the stricture or gone by the side of it we often have no means of knowing, and fortunately no reason to suppose that it will make any material difference in the final result. Having established a communication between the urethra behind and before the stricture, all that remains is for us to pass a full-sized catheter along the whole canal, and tie it with tapes so that it shall not slip out from the bladder. The after treatment consists in keeping the catheter in the bladder for a length of time which should vary according to the case. If your incisions have been extensive and a wide space has intervened between the two portions of the urethra and particularly if you fear that the incisions have passed round rather than through the stricture, then the catheter had better be allowed to remain a week or ten days, changing and cleaning it at intervals, in order to mould round the granulations which spring up to form the new portion of the canal. If, on the other hand, you have had to cut but little in going through the stricture, so that there is but little new urethra to be formed by granulation, then it is not best to leave the instrument in more than two or three days. In either case, however, it should be introduced daily for a time, and in fact as often and for as long a period as may be necessary to prevent a recontraction of the divided stricture.

(To be continued.)

PUBLIC HYGIENE instructs man how to remove from his midst the prolific sources of disease; to level the thick forest which intervenes between his homestead and the free passage of the purifying breeze, and the access of the genial rays of the sun; to drain or fill up reeking swamps and festering pools; to cleanse foul and fetid sewers and cesspools, and the proper system of drainage and sewerage for large cities; to build barracks and hospitals in salubrious localities; to remove bodies of troops from those which are not so, to others that are, thus greatly diminishing the mortality of armies and the expenditures of governments; to oppose the lazaretto and the quarantine to the introduction of pestiferous effluvia; to purify the infected holds of ships; to cleanse the interiors of foul and filthy dwellings, and to separate their over-crowded masses of disease-producing inhabitants, and so to build tenant-houses, as to secure alike the health and comfort of their inmates. It teaches him how to effect the ventilation of all buildings destined for the reception of large concourses of individuals—prisons, churches, theatres, public schools, lecture-rooms and halls of legislation. It secures for the interior of hospitals, that necessary supply of pure air, which assures their inmates against the prevalence of those terrible scourges, hospital typhus, dysentery, erysipelas, gangrene and puerperal fever, which have from time to time produced in those institutions such an amount of mortality, as has caused it to be gravely debated whether hospitals were not, upon the whole, a greater curse than blessing to the poor. It removes from wards and other places, into which they had obtained access, all malarious influences, by means of suitable ventilation, cleanliness and disinfecting agencies.—*Dr. W. C. Roberts' Eulogium of Medical Science.*

Original Communications.

DYSPNOEA AS A MECHANICAL CAUSE OF CONGESTION OF THE LUNGS.

BRING AN

ABSTRACT OF ONE OF A SERIES OF LECTURES ON "DYSPNOEA,"

Delivered at the College of Physicians and Surgeons, during the Spring Course of 1890.

BY ANDREW H. SMITH, M.D.

It has long been known that severe or protracted dyspnoea gives rise to a greater or less degree of congestion of the lungs, and various theories have been proposed from time to time, to explain this result. Haller supposed that the impeded play of the lungs presented a mechanical obstacle to a free circulation of the blood through those organs, and hence an accumulation in the pulmonary vessels. (a) Dr. Goodwyn (b) maintained that the imperfectly aerated blood did not afford the necessary stimulus to the left side of the heart; that therefore the left chambers contracting feebly, emptied themselves imperfectly, and the blood set back into the lungs. Bichat (c), again, supposed that the circulation of venous blood through the substance of the heart, produced a more or less perfect paralysis of that organ, increased by the depressed condition of the nervous system, and that the blood stagnated in the lungs, as in the systemic circulation, from a deficiency in the propulsive force. This view continued to be held for a long time, until the publication of Dr. Kay's work on asphyxia, in 1834, introduced a new theory, which is the one generally held at the present time. Dr. Kay shows that the obstruction begins in the lungs, and attributes it to the chemical condition of the blood, which he conceives to be such as to prevent its circulation through the minute pulmonary capillaries. He says: "The laws generally observed to regulate the action of the small vessels in other structures would be violated if the vessels which usually carry arterial blood, were also able to convey, with equal facility, venous blood in every stage of its changes until it acquires its darkest color." And again: "When venous blood enters those vessels which formerly conveyed arterial blood only, this degenerated fluid is no longer able to excite their action, and the circulation stagnates in the structure of the lungs." (d)

In further elucidation of this theory, a species of "vital attraction" has been supposed to exist between the walls of the capillaries and the blood, by which the circulation was facilitated. This attraction, however, was supposed to be operative only in the case of arterial blood, and consequently to cease to act as soon as the blood assumed a venous character. (e)

More recently, Prof. Wintrich has advanced the opinion that the pulmonary congestion depended entirely upon the paralyzing effect, upon the heart, of the circulation of venous blood in the coronary vessels, and that the nerve-centres suffered no diminution of activity from the impure nature of the blood with which they were supplied. (f)

C. J. B. Williams (g) gives it as his opinion that at least the larger pulmonary vessels possess a contractile power, which is called into action upon the application of an unusual irritation. Such an irritation he supposes to be produced by the presence of non-arterialized blood, and the result is an obstruction of the circulation.

Now the degree of congestion capable of explanation by any or all of the foregoing theories, can be readily

(a) *Elementa Phys.*, lib. viii., sect. iv.

(b) *On the Connexion of Life with Respiration*. London, 1798.

(c) *Recherches sur la Vie et la Mort*, p. 329 et seq.

(d) *Physiol. Pathol. and Treat. of Asphyxia*, pp. 20, 21.

(e) *Alison*.

(f) *Virchow's Handbuch der spec. Pathologie u. Therapie*, 5 Band.

1 Abtheil. p. 213 et seq.

(g) *Diseases of the Chest*, pp. 44, 50.

estimated by examining the lungs of an animal destroyed by section of the medulla oblongata. This operation produces an immediate cessation of the respiratory movements, and death by apnoea is the result. The action of the heart is in no way directly interfered with, and we have present, therefore, all the conditions for the production of congestion, which are contemplated in any of the above hypotheses. Were they sufficient to account for all the phenomena observed, we should expect to find in this case the maximum of congestion, or, at least, a degree of congestion equal to that produced by ligation of the trachea. But in reality a most striking difference is observed. In numerous instances in which I have performed this experiment, some degree of congestion was uniformly found when death was caused by section of the medulla, but it was insignificant when compared to that produced by occlusion of the trachea. The chemical condition of the blood must be the same in one case as in the other, and its effect upon the heart, lungs, etc., also the same. Therefore to account for the excess of congestion in the latter case, over that in the former, we are compelled to assume the existence of a cause of congestion, other than those given in the theories cited. This cause is to be found in the increased energy of the respiratory movements. In considering the mechanical part of respiration, we are apt to overlook the fact that there are two avenues of ingress into the lungs, one by the air passages for the air, and another by the blood vessels for the blood, and that the filling out of the space acquired within the thorax, by the expansion of its walls during inspiration is accomplished, not by one of these avenues to the exclusion of the other, but by both; that, in a word, we respire blood in precisely the same way, and by precisely the same mechanism as we respire air. The amount of blood drawn into the lungs in an ordinary inspiration is small, owing to the fact that the space acquired within the chest is readily filled out by air admitted through the trachea. But, obstruct the entrance of air, and at the same time increase the force of the inspiratory effort, and the amount of blood entering the lungs may be greatly increased. The atmospheric pressure upon the vessels within the thorax is rendered less than that upon the vessels of the body generally, and a rush of blood from every direction towards the thoracic cavity is the result. Hence it is evident that in every case of dyspnoea depending upon obstruction of the air passages, there must be a congested state of the lungs at the termination of every inspiratory effort. But is not this congestion relieved during expiration? In normal respiration, the quantity of blood drawn into the lungs, at each inspiration, is so small that it is readily expelled during expiration by the resiliency of the vessels, and by the pressure exerted upon them by the contracting tissue of the lung. Nevertheless, the blood, being a heavy, incompressible fluid, opposes a certain degree of resistance to this expelling force, and hence some little time is required for the complete removal of the temporary congestion. Under normal circumstances the interval between the inspirations is sufficient for this purpose. But in dyspnoea, in addition to the overloaded condition of the vessels, the interval between the inspirations is diminished. At the same time the effect upon the vessels of over distension, is an impairment of their tonicity. We have therefore three circumstances working together to produce an accumulation of blood in the lungs with each respiratory act. 1. The amount of blood to be expelled is increased. 2. There is less time allowed for its expulsion; and 3. The expelling force is diminished.

By means of the following experiment, I have been able to demonstrate, by a single operation, the difference between the degree of congestion resulting from non-aëration of the blood, and that produced by the additional effect of increased energy of the respiratory movements. A ligature was placed around the trachea of an animal, and drawn so tightly as to prevent completely the entrance of air into the lungs. At the same instant that the ligature was tightened, the thorax was freely opened on

one side, so that the air passed without obstruction in and out of the pleural cavity. By this means the influence of the respiratory movements upon the lung of that side was entirely suspended, while with respect to the other lung, it remained comparatively unimpaired. On examining the lungs after death, the one on the side which was opened was found to be but slightly congested, while the other was gorged with blood. The chemical condition of the blood must have been the same in both lungs, since both were equally excluded from the atmosphere. The effect of any change taking place in the action of the heart, or in the pulmonary vessels, must also have been the same in one lung as in the other, and we have therefore no other way of explaining the difference in the degree of congestion, than by ascribing it to the effect of the respiratory efforts, since this was the only influence to which both lungs were not equally exposed.

It would seem, therefore, that we are justified in considering it as a maxim that in every case in which the respiratory movements are increased to any considerable extent in force or frequency, there must be a proportionate degree of congestion of the lungs, as a *necessary mechanical result*. The importance of this fact can scarcely be over-estimated, since in nearly every pulmonary disease we may have dyspnoea, and, as a rule, pulmonary diseases are aggravated by congestion.

To illustrate the operation of this principle, let us take for example a case of bronchitis. At the outset of the disease, the bronchial mucous membrane is congested, its vessels turgid with blood. This condition implies a thickening of the membrane and a diminution of the calibre of the tubes, and hence an obstruction to the entrance of air into the lungs. At the same time the accompanying febrile movement quickens the circulation, and produces an increased demand upon the lungs. The respiratory movements become more frequent and forcible, and the expansion of the thorax not being responded to by a prompt and sufficient influx of air into the lungs, a compensating increase in the amount of blood flowing in is the consequence. The pulmonary vessels, already overloaded, receive a new supply, and their tonicity, already impaired by the effect of the disease, is still further diminished by this increased distension. With every increase of congestion, there follows an increase of obstruction and therefore of dyspnoea, which, in its turn, gives rise to a further increase of congestion. And so the process continues, the congestion aggravating the dyspnoea, and the dyspnoea aggravating the congestion, until finally the tension within the vessels arrives at such a point, that a serous effusion takes place into the bronchial tubes, mingling itself with the products of inflammation. By this means the tension is relieved, and the actual stasis which would otherwise result is avoided. But, if, as is often the case, the feebleness of the patient renders a sufficient expectoration impossible, or if the bronchial tubes, laboring under the disadvantage of having lost their ciliated epithelium, and of having their circular muscular fibres paralysed, cannot relieve themselves of the accumulating mass, then suffocation is inevitable, unless the process can be arrested by the intervention of art.

From the above considerations it follows that the success of any remedy employed for this purpose will be, to a great extent, in proportion to its influence, direct or indirect, upon the dyspnoea. The results in numerous experiments, which I have performed upon animals, and in a few cases where the same method has been tested upon the human subject, lead me to the belief that in cases in which the cause of the obstruction cannot be directly attacked, the most direct and certain means of relieving the dyspnoea, is by affording to the lungs an atmosphere which shall contain in the volume which finds access to the air cells, a quantity of oxygen equal to that respired in health. By this means the demand for oxygen is supplied, without the necessity for those violent muscular efforts which aggravate the cause of the dyspnoea, while at

the same time they exhaust the strength of the patient. With the necessary apparatus a sufficient supply of oxygen can be generated (at the bed-side) to continue the respiration indefinitely, and so far as my experiments extend made no danger whatever is to be apprehended from its use.

A CASE OF FRACTURE OF BOTH FEMURS BY MUSCULAR SPASM.

BY FREDERIC D. LENTE, M.D.,

OF COLD SPRINGS, N. Y.

L. L.—, aged twelve years. This child, a boy, was in good health until he attained the age of fifteen months, when he was attacked with some cerebral affection that resulted in *epilepsy*, from which he has suffered to the present time. His affliction has been terrible. For the first year his seizures would recur about monthly, lasting several days, with intervals of from one to two hours between the paroxysms; subsequently they increased in frequency, and he has had as many as thirty or forty during the day, of a most violent character. They continued thus for some years, he being, during that time, under charge of my predecessor, Dr. A. L. Sands, now of New York. Sometimes there would be an interval of two or three weeks between the attacks, at other times they continued for days and weeks. For the past year or two, the intervals of exemption have become longer, generally about a month, but the attacks, when they do recur, are no less violent. The effect has been, of course, to destroy the intellect of the child, his power of speech, also his locomotive power to a considerable extent. There has been partial hemiplegia of the right side for some years. His appetite and digestion have been unimpaired during the whole of his sufferings, and his physical development has not been backward. Until a year or two ago he could stand upright, and could move about the room in a rapid, irregular manner, with assistance, using mostly the left leg; but, as he grew older and heavier, his feet became clubbed from relaxation of the ligaments, and for a long time he has not been able to stand at all; but he takes considerable exercise in his own way, throwing himself about in bed, and moving frequently from side to side, requiring constant watching. During his spasms he exerts considerable strength; in this way, his limbs, his upper ones especially, have preserved considerable muscular development. His parents are healthy, as are the other children, four in number. His convulsions are always of the *tonic* variety and very severe.

On April 10th, 1859, his spasms had been recurring every few minutes with great violence; during one of them, while he was held in bed by one of the family by the arms and shoulders, a number of others being in the room, a loud snap was heard by all present. It was thought that the hip "had slipped out of place," and upon examination by the parents, what they supposed to be an extensive swelling was perceived at the upper part of the left thigh. Upon being called in soon after, I recognised it at once as a fracture of the femur; its seat is the junction of the upper with the middle third of the bone. It is stated by the friends, that, at the instant of its occurrence, the thigh was flexed with great force, by the intensity of the spasm on the pelvis, and the fracture was evidently effected by the powerful action of the flexor muscles of the thigh. Assisted by Dr. Richardson, I administered ether, extended the limb, and applied a thick pasteboard splint to the thigh, carrying the bandage around the pelvis, the only idea being to secure union with the least possible inconvenience to the patient, with little regard to shortening.

June 1st.—Union of the fracture is firm, with considerable bowing and shortening, as was anticipated. A pasteboard splint encircling the thigh, and coated with a solution of shellac to prevent injury from urine and other fluids, is still kept on to prevent a repetition of the fracture, as he still has the convulsions.

Dec. 13th.—The *right* femur was fractured to-day in precisely the same manner as was the left. Put it up in the same manner. Jan. 29th.—Patient's health has been gradually failing since the occurrence of the last fracture, and to-day he died from gradual exhaustion. No attempt at union of the fracture has taken place. No autopsy could be procured.

Remarks.—I have been thus particular to cite the antecedent and attendant circumstances connected with this accident, because it is an extremely rare one. The occurrence of fracture from muscular exertion, or from the application of very slight force in cases of the cancerous and other diatheses affecting the integrity of the bony structures is not very uncommon; but in case of healthy bones (the *long* bones) the possibility of such an accident is positively denied by surgeons of note and authority. But Samuel Cooper cites a few instances which he considers authentic, and knew of one himself. In one instance it was the *femur* which was fractured, in the case of a cabin-boy, who attempted to maintain his balance on deck during the violent rolling of the vessel, and in making a powerful effort to do so, fractured this bone without falling to the deck at all.

In the present case there was no evidence of any unhealthy condition of the bones, and the brief history preceding the date of the fracture will serve to show that they were characterized by no unusual fragility, although smaller, no doubt than they should have been at the age of the patient, as were the muscles of the lower extremities also. What renders the case more remarkable, perhaps unique, in its character, is the fact that the bone was fractured during a *tonic* convulsion, that is by a steady pulling of the muscles, and not by a sudden jerk, as in the other recorded cases. His spasms were always of this kind both before and after.

July 10th, 1860.

REPORT OF THE CASES OF FRACTURE OCCURRING IN PRIVATE PRACTICE,

WITH OBSERVATION UPON TREATMENT.

BY DAVID P. SMITH, A.M. M.D.

OF SPRINGFIELD, MASS.

In reviewing my professional business for the last six years and a half, my attention has been irresistibly drawn to the cases of fracture treated during that period. The mind naturally reverts to, and retains a vivid impression of, those cases which have occupied the most time and attention. I am of the opinion that much of the time was spent in attempts to obviate, by constant supervision, the inefficiency and awkwardness of machines erroneous in their original conception. The importance of this subject, and the desire of alleviating in some degree the sufferings of those meeting with this form of injury, are my only apologies for this article. Much of the apparatus now so sedulously urged upon the profession is Procrustean in conception and adaptation, and having suffered from them to a considerable extent, both in purse and patience, I have arrived at the conclusion that a great deal of ingenuity and application has been wasted for want of a proper appreciation of the objects to be gained. A brief survey of my cases, and as brief a statement of the conclusions drawn from them, will, I hope, interest without fatiguing the reader.

SEVEN CASES OF FRACTURE OF THE FEMUR.

Case 1.—March 25, 1853. Boy, set 8; fracture of right thigh at the junction of the upper and middle thirds; applied a modification of the double inclined plane; but, finding that his restlessness continually disturbed the bone, I changed it for the long splint, with one inner splint reaching from the perineum to the heel, enveloped in a splint-cloth. A short splint was placed in front, and also, one behind the thigh. They being well padded, accurately

placed, and firmly bound on, so completely fixed the bone that he could roll around as he pleased without in the least disturbing the fracture. At the end of five weeks I removed the splints, and shortly after met him in the street walking without a trace of deformity.

Case 2.—Fracture of the neck of thigh-bone, occurring Jan. 12, 1854; presented nothing of interest except that persistence in getting the patient out of bed, after the end of a fortnight from the injury, although greatly against her will, and manifestly greatly to her discomfort, preserved her life. The limb never could be used.

Case 3.—Mr. C., Sept. 1, 1854. Sustained a fracture of the femur just above the knee-joint, and the tibia and fibula of same limb. The limb was placed upon a Goodwin's leg splint, and both fractures carefully adjusted, save a corner of the tibia which obstinately stuck up above its proper level. Finding the extending power of the splint insufficient I applied Jarvis's adjuster, and making strong extension the elevated point dropped into line. On the 3d I swung the splint from the ceiling, and he progressed rapidly; the fracture of the femur was firmly consolidated at the end of five weeks; but the union of the tibia was not completed until the end of ten weeks from the injury; thus showing that of two fractures in the same person one may unite much sooner than the other.

Case 4.—June 16, 1856. Mr. —, 83 years old, met with fracture of femur at junction of upper and second fourths; applied Desault's splint without expectation of union; at the end of a fortnight, finding him doing extremely well, and recognising the importance of enabling him to rise, I endeavored to apply a starch bandage. The fracture was so high up that I could not fix the upper fragment by the bandage, and was therefore obliged to let him remain in bed. The weather being very hot I feared much for the result. At the end of about six weeks the fracture had firmly united; but cholera morbus set in, and in his enfeebled state, he fell an easy victim, dying at the end of about seven weeks from the receipt of the injury. The femur was firmly united and did not yield even on the application of great force. I have no doubt his life might have been saved could I have put on a splint that would have allowed him to rise. In another such case I should either use the sole-leather splint, hereafter described, or Prof. N. R. Smith's anterior splint, with every expectation of a favorable result.

Case 5.—Fracture of neck of thigh-bone produced by tripping in a hem of the carpet; fracture probably occurred before the fall, as the old lady said she felt something give way before she fell.

Case 6.—Oct. 24, 1858. A young lady, at Mt. Holyoke Female Seminary, ran backwards off from the top of a stairway, and fractured her femur just above the condyles, the point of the upper fragment penetrated the skin about two inches above the patella. Dr. Kittredge, the resident physician, promptly reduced the displacement. Eighteen hours had elapsed when I saw her; knee greatly swollen and she suffered great pain; placed the limb upon a Goodwin's carved, double inclined-plane splint, and swung it from the ceiling inclining the cords forward so as to make all the extension that she would bear. I visited her again Nov. 2d, and found her doing well, but a dimple was plainly perceptible about three inches above the joint, produced no doubt by entanglement of the sharp extremity of the upper fragment in the fibres of the rectus muscle. I increased the obliquity of the cords so as to make more extension, and in order to prevent chafing under the knee; arranged the splint so that the leg from the knee down lay horizontally, while the thigh was at an angle of 45 degrees with the bed. Dec. 4. The angle of the splint had been gradually increased until now the limb was nearly straight; union had not yet taken place, for on bending the knee a little there was an evident rising of the lower end of the upper fragment. I now applied a starch bandage from the toes to the groin. A few days later, the attending physician, Dr. Kittredge, informed me that the bandage had been very long in

drying. We agreed to attach a cord to the foot, and passing that through a pulley, to make all the extension she could bear by suspending weights thereto; at the same time to apply a broad leather belt firmly around the seat of fracture. This dressing was continued until about thirteen weeks from the time of accident, when the union was firm enough to allow of carrying her home.

REMARKS.—In reflecting upon this case I have come to the following conclusions:—

1st.—That fractures, and especially compound fractures, of the condyles of the femur must, in order to procure the greatest comfort for the patient, be treated upon some form of the double inclined plane, and be swung from the ceiling or other point of suspension.

2d.—That sufficient extension can be made by attaching the foot to the foot-board by a broad strip of adhesive plaster extending from the knee down, around the foot-board, and up back to the knee upon the opposite side; and then inclining the suspending cords as far forwards as the patient will bear.

3d.—That sufficient counter extension can be made by raising the foot of the bed.

4th.—That the best method of preventing excoriation under the knee is to use "Watkins's Improved Splint," which is so arranged about the joint as to prevent undue pressure, and also to make the motions of the knee and splint exactly coincide.

Case 7.—Jan. 22, 1859. Mrs. W——, somewhat advanced in years, fell upon a plank walk, fracturing her right femur just below the trochanters; found her so short and corpulent that I despaired of being able to adapt any of the ordinary splints; applied, instead, upon the outside of the limb, from just above the crest of the ilium to a short distance below the heel, a piece of strong un-oiled sole leather, six inches broad, soaked in warm water; a similar piece was applied upon the inside of the limb, reaching from the perineum just below the heel. These soaked in warm water, and enveloped in two or three thicknesses of cotton cloth, I carefully fitted, fayed, and applied to the limb by means of a roller bandage. Around the pelvis and upper part of the thigh I took care to apply, very thoroughly, a firm spica bandage. The breadth of the splint at the lower end effectually prevented any inversion or eversion of the foot. In a few hours this casing became perfectly dry and as inflexible as sheet iron. It fitted as accurately as would a plaster cast: indeed when I removed it entirely, four weeks after the accident, there was not the slightest mark of unequal pressure to be found on the most careful examination.

REMARKS.—This mode of dressing, while it ensured perfect immobility of fractured surfaces, gave rise to no inconvenience to the patient. There was no galling, and consequently the irritative fever succeeding the fracture was of very short duration. At the end of four weeks I removed the splints, and at the end of six or seven weeks she began to get around on crutches. At the end of four months she had very good use of the limb. She now suffers but little inconvenience from it. There is one inch shortening. I am convinced that no other kind of dressing could have been retained upon the limb without great excoriation, for her skin and cellular tissue seemed as tender as those of an infant. I now keep prepared, and should apply a similar dressing to any fracture occurring about the head and neck of the femur in an elderly person. It might be well to attach a weight to the foot, by means of a cord passing over a pulley and fastened to adhesive straps as described, so as to keep up extension and counter-extension as long as it could be borne, or while the leather was hardening. It is proper also to remark that on one occasion, having applied these hide splints to a case of diseased knee-joint in a young lady, an eruption of a few days' duration appeared upon the skin, caused, as I think, by the moisture exuding from the leather. I always, therefore, take care to see that some dry cloth is placed between the skin and wet leather.

SEVEN CASES OF FRACTURE OF TIBIA.

Case 1.—May 8, 1854. Mrs. G—— stepped upon a rolling stone and fell on the sidewalk; gave æther and examined the limb from the knee down, but could discover no fracture, although I was persuaded, by the intense pain referred to the shaft of the tibia, that there must be one. I placed the leg in a copper half-boot splint, after bandaging it carefully, and left it for two or three days; examining it again made out a fracture at the juncture of the middle with lower third.

Case 2.—June 11, 1854. Simple fracture of tibia in a child aged six.

Case 3.—May 2, 1854. Fracture of tibia of one leg and fibula of the other, both near the ankle, produced by the passage of an unloaded platform car over them. Great bruising of the soft parts, and delirium rendered the case rather critical, but under the use of gin and opium he gradually convalesced and soon gained perfect use of his limbs.

Case 4.—22d Oct. 1856. Mr. H—— met with oblique compound fracture of tibia. I used in this case Welch's and Seymour's double inclined plane splint, and also Jarvis's Adjuster; had great difficulty in keeping up sufficient extension to prevent protrusion of the end of the upper fragment through the skin. The angle of the splint had to be continually varied to relieve, as far as possible, its pressure under the knee; the discharge also accumulating in the splint under the limb caused great irritation. The counter-extending force was applied in turn to the knee, groin, and armpit; and in each was not well borne. Continual supervision and modifications of appliances were, in this case, the elements of success; union was firm at the end of nine weeks; one or two small pieces of bone were discharged about a fortnight after; limb was without deformity and of the normal length. I am confident that the apparatus I now use would have saved two-thirds of the drudgery in this case and been productive of as perfect a cure.

Case 5.—14th Aug. 1857. Mr. H——, an engineer on the Conn. Riv. R. Road, of perfectly temperate habits, about seven months previously, 7th January, 1857, suffered a severe compound fracture of the tibia, complicated with great bruising of the limb; large collections of matter formed among the muscles which necessitated extensive incisions; treatment, previous to the time I was called, was no doubt judicious—being conducted by men of acknowledged ability. At the time of my visit there were no evidences of the slightest union; ulcers on the inside and outside of the limb discharged pus; a large surface of bone was exposed at the bottom of each sore, and several pieces of dead bone had come away; amputation had been advised by the late Dr. Deane of Greenfield. My advice was:—1st. To give stimulants and tonics, as the patient was very pale and weak, although able to sit up. 2d. To put on firm splints, give him crutches and get him into the open air. My reasons for the advice I gave were these. The appearance of the limb and of the man betokened tardy union, or perhaps what would better express the entire want of any feeling of firmness in the limb, no union at all. I thought his long confinement to the house was calculated in the highest degree to encourage this state of things. It is difficult for me to convey any adequate idea of the entire mobility of the bones. It was much greater than is usual in recent fracture, probably in consequence of the want of tension in his muscles. Sept. 7. Found exactly the same state of things, except, perhaps, a little less discharge of pus; and again urged the same treatment; it was adopted, and in a week from this time he was about on his crutches; union commenced about two months after this and very gradually grew solid. He continued to visit me in my office until Dec. 1858. During this time small fragments of bone were extracted, and I made two or three attempts, by gouging off carious bone, to remove all disease; found I could not do this without breaking up the newly formed callus to such an extent as to endanger the integrity of the limb. After the union became firm there was another

struggle to call into action the wasted muscles, which from long disease and bandaging had degenerated. By long and steady perseverance this end was at length accomplished. Early in the spring of 1859 he was able to throw aside every artificial aid, and about the 1st of June, 1859, he went to work as engineer of a stationary engine.

I will quote a case nearly similar to this from a review of "Dr. Houston on Fractures," in the *Médecine-Chirurgicale Review* for April, 1836. The Dr. says, "The limb was now placed in the extended position; strong adhesive plaster was applied round the broken part, and some blue pill administered. A fortnight more elapsed—eight weeks from receipt of injury—and still the broken pieces admitted of motion on each other. At this period a new and unexpected affection showed itself, namely delirium tremens, in a paroxysm of which the man pulled off the splints and leaped out of bed. In the effort at standing the limb yielded to the weight of the body, and was a second time completely bent at the seat of fracture. Having recovered from the delirium, the patient was removed to his own residence for change of air, and then, when he began to hobble about on crutches, having the thigh well braced with plaster and bandage, the union of the fracture was, after a few months, accomplished."—Says the editor, "We believe that the cause of non-union in this case was quite independent of local management. The patient was accustomed to large amounts of stimulus. Dr. Houston is at pains to inform us that in the hospital stimulus was withheld. The constitution was called on to do hard work and it failed to do it. A man was under our care, as House-Surgeon of St. George's Hospital, on account of simple fracture of both bones of one leg. We laid the limb upon the side, on a splint, and made pressure by means of another side-splint and bandages; at the end of six weeks we found, to our surprise, that the union was so soft as to allow of flexion of the bones at the seat of fracture. We now inquired with more minuteness into the habits of the patient, and we found that he had been accustomed to drink several pots of porter daily. We had previously allowed him ordinary diet and a pint of porter. We now gave him three pints during the day, and put up the limb as before—ossific union rapidly ensued, and the patient was discharged cured in two or three weeks more.

A woman was received into the hospital with simple fracture of one leg, violent spasms of the leg ensued. To relieve these the house-surgeon bled her freely. She had previously been accustomed to a full diet and to porter, and the consequence of the depletion was much debility. The fracture did not unite, and although various means, among others the seton, and cutting down upon the fractured ends of bone, have been employed, the fracture continues ununited by osseous matter." The late Dr. J. K. Mitchell, in an examination on my thesis, asked me if I had ever thought of the plan of administering to patients, in whom false-joint threatened, large quantities of spirits so as to bring on a constitutional disposition to inflammation. I have quoted these authorities at length, and detailed my case in full, to show the steps by which I am led to the following conclusions:—

1st. I consider the failure of ossific union to arise from constitutional causes.

2d. A healthy, robust man, of perfectly temperate habits may, by long confinement to the house, and the drain of profuse suppuration, suffers from the absence of his accustomed fresh air, sun-light, and exercise, as a dram-drinker does from the absence of his toddy.

3d. At this period there is danger, not only that the patient will not improve, but that ligamentous union will occur requiring to be removed or destroyed by an operation.

(To be continued.)

A WRITER in the *London Medical Times* says, that Mr. Simpson uses annually, in his practice, no less than from five to seven gallons of chloroform.

Reports of Hospitals.

BELLEVUE HOSPITAL.

GANGRENE OF THE LUNGS.

GANGRENE of the lung, although a rare disease, is by no means so rare as Laennec, and some other writers would lead us to believe. One or more examples are almost always to be found in the wards of this hospital. The clinical history of the disease is, when it can be *clearly traced*, according to Dr. McCready, similar to the case detailed below, and by no means bears out the commonly received opinion that the gangrene is caused by pneumonia. On the contrary, gangrene occurs first and gives rise to the pneumonia, which is secondary to it. The notes of the following case were furnished us by Dr. ALEXANDER HADEN, House Physician.

Bridget Cannon, washerwoman, aged 48, native of Ireland, admitted to Bellevue Hospital, November 9th, 1859. She had no hereditary predisposition to disease, as far as could be ascertained; was not of strictly temperate habits; had been generally healthy up to the commencement of the present illness. Eighteen days before her admission to the hospital, while taking tea in the evening, without any preceding cough or appreciable thoracic difficulty, she was suddenly attacked with a distress in the right side, followed very soon by cough, highly offensive breath, and expectoration of matter disagreeable to the taste, of an offensive odor, of a dark color, and slightly mixed with blood.

On admission, she was quite exhausted, but not markedly reduced in flesh; cough continued, expectoration free, of a greenish color, and, as well as her breath, intolerably offensive. Her tongue was somewhat furred; the skin dry and feverish; pulse weak, about 96; bowels regular; respiration short and hurried. She complained of pain in right side on taking a full inspiration. On examination, pain was not much increased on pressure; no dulness could be discovered on *percussion* over any part of the chest, nor on auscultation any unnatural respiratory sound, except an occasional mucus rale. Dr. McCready examined the patient on the following day, but could discover, on careful physical exploration of the chest, no unnatural condition. He did not hesitate, however, to pronounce it a case of gangrene of the lung, from the peculiar odor of the breath, the character of expectoration and previous history. The diseased portion of the lung was thought to be central, occupying one of the lobes of the right side. The patient was placed on tonics, nourishing diet, and a small amount of stimulants. 17.—Respiratory murmur was noticed to be less complete in the scapular region, and dullness on percussion over the same. 18.—There were now undoubted signs of the formation of a cavity. Her pulse became more frequent, and her strength began to fail much more rapidly. 19.—Cavity was well marked in the scapular region. On the afternoon of the 20th she died; symptoms a short time before her death were not alarming; cough, expectoration, and offensive breath continued unchanged up to the time of death. *Autopsy twenty-four hours after death; body not emaciated; on opening the thorax, a large gangrenous cavity was found in the centre of the middle lobe of the right lung, involving also the lower portion of the upper lobe, and the upper portion of the lower lobe; no tubercles; other organs healthy.*

AMPUTATION AT THE ANKLE JOINT BY SYME'S METHOD.

Amputation at the ankle joint by the method first practiced by Mr. Syme, has been frequently performed in this Hospital, and with almost invariable success. The wounds have healed kindly, and left a firm cicatrix which has subsequently shown no disposition to ulcerate when subjected to the constant pressure of use. It has been remarked, in

nearly every instance, that the patient was able to leave his bed much earlier than in any other form of amputation of the lower extremity. In one instance a patient walked upon the stump on the fifteenth day, and thereafter continued to use the limb. The only instances of failure have been where the soft parts about the ankle and heel have been lacerated severely, as in railroad injuries, thereby resulting in sloughing.

This operation was recently performed by Dr. Parker. Before proceeding to the operation he took occasion to introduce to the class, a nurse in the hospital, whose left foot was amputated at the ankle joint, by Dr. Stephen Smith, upwards of two years ago. The stump was perfectly sound and healthy, and had never given her the slightest uneasiness. She now wears one of Palmer's artificial feet, and her movements have been so easy and natural, that many expressed surprise when she exhibited an artificial foot.

The advantages of this operation were briefly stated as follows:—1. The extremity of the stump is formed by the thick, callous integument of the heel, upon which the patient bears his weight with as much impunity as on the sound and healthy heel; and this he is able to do as soon as the wound is cicatrized. 2. The limb is but from one to two inches shorter than the other, and admits of the most perfect adaptation of an artificial foot, which so far remedies the defect of the limb that locomotion is as easy and graceful as before the operation.

Dr. Parker's patient rapidly recovered with a good stump. He was subsequently attacked with pulmonary tuberculosis, of which he died before leaving the hospital.

NEW YORK HOSPITAL.

ANEURISM OF THE ARCH OF THE AORTA—RUPTURE INTO THE PERICARDIUM.

[Reported by JOHN C. ACHESON, Senior Assistant.]

The patient, George L—, æt. forty-two, was admitted April 5th, 1860, during the service of Dr. J. H. Griscom, complaining of an intense pain in the cardiac region, and dyspnoea. The pulse was ninety, full, but somewhat irregular. He stated that about three months previous he had suffered from an intense pain in the cardiac region and right shoulder, accompanied with dyspnoea and palpitation. This attack had been followed by others of a like character, until, a week ago, when he was seized with one, which, as regarded the severity of the pain, was out of all proportion to any of the others—causing him to fall in the street in a partially insensible state. He was removed to a drug store near by, where he was relieved by the application of sinapisms to the cardiac region, and the internal administration of anodynes. The third day after this he was seized with another paroxysm which was similar, but less severe, and on the 5th of April he had a third, also slight in character, from which he was still suffering at the time of admission. On examination of the chest, a decided prominence of the precordium was noticed and the dullness in that region was very much increased in extent. Nothing abnormal could be detected in the heart or large vessels, with the exception that the sounds of the former were somewhat distant and indistinct. The patient never had syphilis, nor was he addicted to intemperance. The pain referred to was soon relieved by the administration of an anodyne, and the application to the part of a stramonium poultice. He continued, as far as the pain was concerned, in a comfortable condition for the next five or six days, during which time he suffered from a slight attack of jaundice, for which mercurials were given with a good effect. On the 11th of April, he was seized with another paroxysm of cardiac pain, which, however, was slight in character and soon subsided. The next day, while sitting quietly in his chair, he fell to the floor in a fainting-fit, from which he never recovered.

The autopsy was made fifteen hours after death. An aneurism the size of a man's fist, was found upon the ascending arch of the aorta, and just below the point where the pericardium was reflected from the vessel, a rupture three-fourths of an inch in extent had taken place. The pericardium was immensely distended with blood. The valves of the heart were healthy, but the organ itself was considerably enlarged, soft and fatty, while its surface, as well as the lining of the pericardium, was covered with a layer of old false membrane; atheromatous deposits existed all along the arch, but particularly around the seat of the aneurism. The liver was the seat of cirrhosis which was pretty far advanced. The kidneys were congested, but otherwise healthy. No disease was found in any other organ of the body.

RUPTURE OF STOMACH.

[Reported by R. F. WEIR, M.D., Resident Surgeon.]

A boy, aged fourteen, while flying a kite on the roof of a five-story building, having just before partaken of a hearty dinner, slipped and fell to the ground, a distance of about fifty feet, striking, in his descent, an intervening clothes-line, which broke under him. On admission into the Hospital, shortly afterwards, he was much prostrated, there was also considerable jactitation present, and great pain was experienced on pressure over the entire abdomen, which presented, across its lower portion, a transverse depression, but no abrasion or contusion. The patient did not rally, and died in about eleven hours after he first came under notice. The autopsy, twelve hours after death, revealed the existence of a rupture of the walls of the stomach, one and a half inches in length, with irregular lacerated edges and slight eversion of the mucous membrane, situated on its anterior surface a short distance from the pylorus, and running parallel to the long axis of the organ. The organ was, of course, collapsed. The intestines were moderately distended with gas, their peritoneal coats were much injected, and were covered with a thin layer of recent lymph. About two and a half quarts of turbid serum, plentifully mingled with shreds of corned beef and cabbage, in a slightly digested state, were found in the cavity of the peritoneum. No lesion of any other viscera nor of any of the adjacent bony parts was discovered.

NURSERY AND CHILD'S HOSPITAL.

ENTERO-COLITIS—CYANOSIS.

THE following case is interesting, on account of the sudden appearance of cyanosis, and the anatomical condition connected with it. The foramen ovale, the valves of the heart, and the ventricular septum presented the appearance usual in infants of one month, but the ductus arteriosus was sufficiently open to admit readily the end of the blow-pipe. Whether the perviousness of this duct was sufficient cause to produce the cyanosis, aided by the inflammatory condition of the system, may be uncertain, but some authors state this as a cause. The notes of the case were taken by Dr. Covell, Resident Physician.

June 9th, 1860.—W. H. McC— (under the care of Dr. ROBERT WARRE), died to-day, aged four weeks. He was nursed, and apparently in a thriving condition till within twenty-four hours of his death, when he was noticed to have diarrhoea, and a well-marked blue tinge of surface. His death occurred quietly, the cyanotic hue continuing till the last moment.

Autopsy, fifteen hours after death.—No emaciation; anterior fontanelle open; good resonance on both sides of the chest; the liver extends one inch below the lower margin of the ribs; weight of thymus gland two drachms; lungs healthy, and readily inflated; the ductus arteriosus open; at the foramen ovale is the usual valvular opening between

the auricles, but so oblique as probably to prevent any admixture of blood; weight of liver five ounces; stomach, jejunum, and upper part of ileum healthy; the mucous membrane of lower part of the ileum, and the entire colon, vascular, and that of the latter thickened; no ulcerations noticed; some of the mesenteric glands slightly enlarged, others natural.

Microscopic Appearance.—The blood contained an unusual amount of granular matter, but the blood discs and white corpuscles appeared to be in the usual proportion; the granular matter was mostly dissolved by ether. The hepatic cells contained few oil globules, and there was less free fatty matter in the liver than is commonly found.

NORTHERN DISPENSARY.

CASE OF INTERMITTENT LIMITED TO ONE HAND AND ARM.

The subject of this attack, was a married woman, aged thirty-four, mother of five children, all of whom died while infants, of various diseases. She was native of a healthy place in Ireland, and has always lived in her present neighborhood, since coming to this country five years ago. She is healthy and robust, and always attends to her own household duties, has lived in an upper room until eight months ago, when she entered a dry, airy basement.

About the first of June she whitewashed her room, and was engaged three days, working at intervals. Her right hand and arm often felt fatigued and cramped, but was relieved on resting. After completing her white-washing, her hand and arm continued to pain her at intervals, and she was particularly distressed by a creeping, and prickling sensation as if the limb were asleep. On the third day after white-washing, these symptoms assumed a periodic form. She awoke soon after midnight with complete numbness of the right arm extending to the elbow. The arm felt several times its natural size, was hot, had not the slightest sensation in it, and was the seat of a severe aching pain. She used friction, a bath of hot mustard water, &c., and in about an hour sensation began to return in the upper part of the arm, and gradually passed down to the hand and fingers, the tips of which were the last to regain their normal feeling. This was followed by a general sweat, lassitude, and sleep. At four o'clock of the same morning she awoke again with the same condition of the arm, and went through the same process of using friction and warmth, and with the same results.

For three weeks following, these attacks recurred with the utmost regularity at twelve o'clock at night, and four o'clock in the morning, always commencing with a tingling, or pinching, in the ends of the fingers. This gradually extended up the limb, followed by complete numbness, but never passed above the elbow. The arm during this time became hot, and the whole body feverish, but there never was a chill, local or general. The only change in these attacks which was noticed during this period was a slight lengthening of the paroxysm. Her health suffered but little, though she felt more languid than usual. She had not seen any case of intermittent fever during the year in her neighborhood. It had been treated as a case of paralysis, but with no benefit.

Regarding it as an irregular form of intermittent fever, quinine was administered, one grain every two hours; on the fourth day, she reported herself cured. She stated that during the first day she took the medicine regularly, and at night the numbness extended up to the middle of the forearm; on the following morning it only involved the hand; she continued the remedy during the next day, and at night it reached the middle of the hand, and in the morning it appeared in the little and ring finger; on the following night it involved only the ends of the fingers, and in the morning she merely experienced a slight prickling sensation in the tips.

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American Medical Times.

SATURDAY, JULY 21, 1860.

OUR SANITARY DEFENCES.

To DEFEND and relieve our fellow men from the preventable causes of disease, is manifestly the highest mission and best service of medical science and skill. And this is no trivial task, for ceaseless vigilance is the price of perfect and continued health. Indeed, life itself is a conflict so universal and perpetual, that we find but an axiomatic truth in that singular definition by the philosophic Bichat—"Life is the sum of the forces that resist death." This ceaseless conflict in defence of life and health seems to be the inevitable destiny of man; and in the civic community and the state, no less than in the individual, must it be vigilantly maintained.

All nations, from the remotest antiquity, have exalted medical art just in proportion to the success of its application to the defence and protection of the people from the preventable causes of disease; and in mythological history is recorded the exalted apotheosis of those early physicians who promoted great sanitary improvements. The ancient Fathers of Medicine were teachers of hygiene; and we know that while the populace of Athens and of Rome, in fear of pestilence, made votive offerings to *Pneustos* and *Febris*, the disciples of Hippocrates sought out the true causes of prevailing diseases, and becoming the counsellors of statesmen and persons in authority, they secured for the people the proper measures of sanitary protection. Even now, as the tourist threads his way across the Pontine Marshes, and, in his approach to the Eternal City, treads the ancient *Ruas* of the Appian Way—viewing afar the remains of immense aqueducts, or noting the extent of outline, and wonderful design of those vast subterranean galleries and cloaces that made Rome the "*urbs pensilis*," how forcibly and definitely does the unwritten story of those ruins of ancient and effective Sanitary Works, declare to us, after nearly a hundred generations, that most vigilantly and vigorously the Romans guarded that physical health which made the Cæsars politically strong, and their capital once impregnable.

Sanitary defences and hygienic rules for the person, the domicile, the municipality, and the state, have always been

found necessary alike to the physical, social, and political prosperity of communities and nations. And if it be true that health and length of days are man's normal estate, it is equally true that disease, frailty, premature decay, and untimely death, are so liable to be his inheritance and lot in this world, that vigilant care, invention, and effort to preserve health, are the established conditions upon which that natural boon is to be perpetuated and enjoyed.

From the earliest ages, and in all communities, history has developed the fact that a high death rate, and frequently recurring endemic and epidemic diseases, mark the earlier period of the growth of cities, as well as the period of their decline; while the remedial agencies by which the public health, and the average duration and probability of life have been increased in any city or nation, conclusively demonstrate at once the necessity and the physical, economic and political importance of sanitary improvements and a code of Hygiene specially adapted to the protection of the public health in every city and state.

The practicability and inestimable value of such codes, and the works they sanction, are at present witnessed in the towns and cities of Great Britain, France, Germany, Austria, and Prussia,—where, notwithstanding the many unfavorable hygienic conditions and influences of a dense and constantly augmenting population, the average duration of human life is continually increasing. For example, in the city of London, during the greater part of the sixteenth century—the century preceeding the great plague—the average duration of life was only twenty years—fifty persons dying annually out of every one thousand of the inhabitants. At that period the streets of London were narrow, ill-paved, and extremely filthy; the sewers were imperfect and badly constructed, water was but scantily supplied, dwellings were over-crowded, and cleanliness was neither encouraged nor enforced. But now, in the middle decade of the nineteenth-century, with its population increased to millions, the average duration of human life in that crowded metropolis has been nearly doubled,—being thirty-seven years—the rate of mortality having fallen to twenty-five in one thousand of the population.

The means by which this astonishing and humane result has been accomplished are simply hygienic, and yet only by a very limited application of such means. Those hygienic measures—the Sanitary Defences of London—consist of—1. A Sanitary Code, sanctioned and enforced by authority of the State, through the agency of the General Board of Health; 2. A Chief Medical Officer of Health, distinguished for professional learning and executive ability; 3. Thirty-two subordinate and skilled Medical Officers, whose duty it is thoroughly to canvass and search out the foci and causes of disease in their respective parishes or districts; 4. Special improvements and public works under municipal direction, specially designed and adapted to promote the improvement of the public health.

Equally efficient are the sanitary systems of the larger continental cities. They have all learned something respecting the economic and political importance of public salubrity; and they have also learned to trust less in *corons sanitaires*, and more in SANITARY WORKS.

New York and our larger American cities successfully vie with the great cities of Europe in all that relates to commercial enterprise, manufactures, popular intelli-

gence, and the practical applications of science and art; but where and what are our sanitary defences? With an abundance of skill and learning in medicine, with hospitals and medical charities unsurpassed by any other city, and with natural advantages equalled by none, this proud and favored metropolis of the western continent has the ignoble reputation of the highest death-rate of any city of equal size in the civilized world—all from preventible causes! This unenviable reputation and the guilt of out-heroding Herod in the destruction of an infant population, is simply the result of criminal neglect. *New York has no Code of Hygiene and no Sanitary Defences worthy the name.*

For the purposes of the appeal we would make to our medical brethren, we need not recount in detail the frightful statistics of mortality and disease in this city. It is our design to examine, and from time to time discuss in these columns, some of the more important questions relating to public hygiene and the sanitary systems—external and internal—of our American cities and large towns, strictly with reference to the duty and influence of the profession, and the elucidation of medical problems and scientific facts, in promotion of sanitary improvements not only in the city of New York, but throughout our country. The march of sanitary improvement has commenced in some of our American cities, and to the honor of the State of Massachusetts, it should here be stated that, at the recent session of her Legislature, that flourishing Commonwealth set its statutory seal upon the General Code of Health that was last year adopted and recommended by the National Sanitary Convention. Such evidence of progress is encouraging and unmistakable, and from the increased attention to hygiene as a department of medicine, as well as by the deep interest evinced in various practical branches of the subject at the recent meeting of the National Convention at Boston, it is sufficiently manifest that Preventive Medicine is popularly and justly regarded as the most exalted dispensation of the applied sciences.

The time has come when every physician should take an active part in efforts to promote sanitary improvements, awaken public interest, and wisely guide the popular sentiment respecting the subject. Our fellow-citizens throughout the State are beginning to be properly interested; and it cannot be doubted that they would readily co-operate with the medical profession in practical efforts to secure the enactment of a General Health Law for the State, with a Sanitary Code for our cities, like that recommended last year by the National Sanitary Convention, and this year adopted by the State of Massachusetts. Why should an enlightened and free people, blessed with abundant means and a healthful climate, pay needless tribute to the demon of Disease? Public health is not only a matter of national and municipal concern, but to every citizen and family it is a subject of far greater moment than the ordinary affairs of the city or State. The watchword of the people should be,—“Millions for defence” from disease,—not a cent nor a vote for “tribute” to the abettors of needless death.

With these thoughts we close this article, intending, however, to recur to this all-important subject on proper occasions in our editorial columns, and thus endeavor so to stimulate professional and public sentiment as to ensure the establishment of suitable Codes of Health in all our American cities.

THE WEEK.

THE records of mortality in this city, for the last week, contain the following item: Deaths by violence, THIRTY-THREE. New York is rapidly acquiring an unenviable reputation for violent deaths. The details of murders and suicides are so constantly the burden of our morning news, that it requires something quite novel in the manner or circumstances of the deaths to attract especial attention. A chapter of domestic scandal which is frequently thereby revealed, or a profound mystery as to the murderer, gives a zest which the public relishes. And sometimes even a sense of horror is awakened, as when a sloop floats up the bay, all begrimed with blood, and all over which gory hands and struggling feet have traced in legible characters, *violence, murder, robbery*; or when a citizen, walking on a public thoroughfare, is deliberately shot, and the *posse comitatus* flying in pursuit of the assassin, another person is also shot down, and the murderer escapes. Although the majority of deaths by violence occur among the dissolute and lower classes, yet the past week or two has furnished marked exceptions to this rule. No one could have read the murders of Walton and Matthews, and the not less revolting murders of Mrs. Schumaker and her child, without feeling the insecurity of human life in this city, when it stands in the way of passion or avarice. The evil influences that are at work in our social state and of which these crimes are the natural fruit, are not difficult of detection, and we shall as the occasion presents make them the subject of special consideration.

The visit of the CHICAGO ZOUAVES to our Eastern cities may properly be regarded with interest by physicians and sanitarians, as being happily adapted to awaken greater attention to the subject of physical education. Here is a company of young gentlemen, who, by strict adherence to physiological laws in all their personal habits, no less than in their special manual exercises and military evolutions, have acquired such dexterity, muscular strength, agility, and astonishing powers of physical endurance, that the press, the populace, and the military of New York can scarcely find words to express the universal admiration and surprise which this young military corps has excited among us. How different this from the degrading engagements of acrobat showmen and the pugilists, both in results to the actors and the effects upon the community! The time and means expended by these young men have been amply rewarded in the increase of enduring physical energies in their own persons, while their wonderful agility and their perfection of *physique*, as manifested in all their manoeuvres, fascinate all beholders, and strongly confirm the opinion, that “the *zouave-ier in modo is fortiter in re*,” no less for the individual man than in the active service of the military corps. Perfect ease of posture and complete command of every muscle are strikingly exhibited in every movement of these men—the well-trained muscles and healthy frame of each individual soldier happily illustrating the theory of the effectiveness of the Zouave corps in battle—viz. complete *unity of purpose* with perfect *individuality of action*. We recommend to young men both the gymnastic training and the peculiar physical habits of these citizen soldiers, especially their rigid abstinence from all that can intoxicate.

Reviews.

DE L'HÉMATOCELE RÉTRO-UTÉRINE ET DES ÉPANCHEMENTS SANGUINS NON-ENKYSTÉS DE LA CAVITÉ PÉRITONÉALE DU PETIT BASSIN, CONSIDÉRÉS COMME ACCIDENTS DE LA MENSTRUATION. Par le Docteur AUGUSTE VOISIN, etc. etc. Avec une Planche. Paris: J. B. Baillière et Fils. 1860. 8vo. 868 pp.

RETRO-UTERINE HEMATOCELE AND NON-ENCYSTED EFFUSIONS OF BLOOD IN THE PERITONEAL CAVITY CONSIDERED AS ACCIDENTS OF MENSTRUATION. By Dr. VOISIN, with a lithographic plate.

THE author first presents a short abstract of the history of his subject, which he divides into two epochs, the former referring to the literature before 1850, the latter, after that date. It was at this period that the disease was for the first time called hematocele by Prof. Nelaton, it having been formerly neither recognised nor classified properly.

The author presents the views of different authors with regard to the nature and seat of the disease, and again points to the fact, as may already be seen from the title page, that he calls those sanguinous epaichements hematocele, which have been encysted.

Of the different names proposed, hematocele retro-uterine, hematocele péri-uterine, tumour sanguine du bassin, the first is adopted. With regard to the question of intra- or extra-peritoneal location of the deposit, Dr. Voisin recognises only the former variety. He considers hematocele retro-uterine an effusion of blood, which is encysted in the pelvic peritoneal cavity between the uterus and rectum, originating from the process of menstruation.

Hence all deposits of blood not occurring at the time of ovulation, not situated behind the uterus in the peritoneal cavity, and not encysted, are excluded from his consideration. The disease in question seems to be of infrequent occurrence, as scarcely fifty observations are known. We believe that this number will, however, increase considerably during the next few years, and will have the same history as Bright's and Addison's disease. When the knowledge of its pathology spreads among the profession, the diagnosis will be more readily made and the number of cases increase. After a minute description of the blood-vessels, which surround the Fallopian tubes, and the ovaries, the author proceeds to expose the different theories in regard to retro-uterine hematocele. Dr. Nelaton attributes this accident to what he calls *porte spontanée*, the blood which, during menstruation, is destined to pass from the ruptured Graafian follicle, through the Fallopian tube, into the uterus, escapes instead, into the peritoneal cavity in large quantities. Dr. Langier adopts this theory, adding the remark that, in order to produce an hematocele, there must exist an abnormal congestion of the ovary more intense than that due to simple menstrual afflux.

Ovarian Apoplexie has been considered as the cause of hematocele retro-uterine by Scanzoni, Puech, Nelaton, and formerly by Laugier. Dr. Voisin is of opinion that the apoplectic character of the hemorrhage found in the cases described, has not been demonstrated. He considers it to be rather a hemorrhage by congestion "because apoplexie would imply a destruction of the tissue." *Hemorrhage of the Fallopian tubes*, as a cause of hematocele, has been admitted by Drs.

Fénerly, Scanzoni, Troussseau, Puech, and Oulmont, and this origin is admitted as an occasional cause of hematocele. *Reflux of the blood from the uterus into the peritoneal cavity by way of the tubes* has been considered by Drs. Bernutz, Ruysch, and Hölle as a cause of hematocele. In the author's opinion all that can be said regarding this theory is, that the question is as yet not decided either in the affirmative or negative, and that more numerous observations than those extant are required to settle it.

Dr. Vigné's and Gallaud's opinion, who trace the origin of hematocele to a *dislodgment of the fecundated or non-fecundated ovum into the peritoneal cavity* seems not very probable—extra-uterine pregnancy, with rupture of the sac and hematocele, are affections of an very different nature. Drs. Richet and Devalz admit a *varicose condition of the ovarian veins and of the broad ligaments* as a cause of hematocele, which accident Dr. Voisin believes to precede sometimes the formation of a free sanguineous effusion, but not a real hematocele.

Among the *predisposing causes* may be mentioned a peculiar condition of the blood, such as is found in eruptive fevers; further a plethoric state, a menorrhagic tendency, constipation as it predisposes to varices of the pelvic veins. Among the *exciting causes* may be counted, in the first place, the catamenial flux. In seven out of ten cases where the accident occurred during menstruation, sexual intercourse was performed during or soon after that time, and in three others it could be traced to undue bodily exercise while menstruation was going on; in five others to mental emotions and fatigue.

Pathogenesis.—Retro-uterine hematocele may be produced by three different causes, viz:—by a congestion and hemorrhage of the ovarian vesicles during menstruation; by the reflux of blood from the uterus into the tubes and peritoneum; by a tubal hemorrhage. The non-encysted effusion of blood may be owing to either of the three above-named circumstances, and besides may be the consequence of a rupture of the sub-ovarian varicose veins. Opposed to Prof. Troussseau's theory, who holds that, during menstruation the "enucleation" of the ovulum was performed without any hemorrhage, Dr. Voisin proves, by the authority of the best French physiologists, that the ovarian vesicles may, even under ordinary circumstances, give rise to a slight hemorrhage at the time of the dislodgement of the ovum. Besides this physiological state, favorable to the production of a hemorrhage, there are many observations recorded to prove that the ovary is very often subject to pathological conditions apt to increase this hemorrhagic tendency. These alterations have been proven to consist in an excessive development of one or more of the Graafian vesicles, the consequence of which is an equable hypertrophy of the vascular apparatus, a more active circulation, and a predisposition to bleeding. If the proofs are abundant to show the existence in the ovary of conditions promoting hemorrhages, the number of post-mortem examinations (seven recorded) already known, do not leave the least doubt as to the this cause in the promotion of hematocele. An ovarian hemorrhage may be due to three different causes, viz: to a venous congestion of the ovary, an altered constitution of the blood (excess or decrease of fibrin), and to hémophilig. The venous congestion may again be caused by too frequent sexual excitement, constipation, and the immoderate use of the corset.

Tubal Hemorrhage.—The mucous membrane of the tube is the seat of a sanguineous exudation during menstruation, which discharge may, in some instances (obs. of Follin and Oulmont), increase to such a degree as to effect a hematocele. The *reflux of blood from the uterus into the peritoneum* is a very rare cause of retro-uterine hematocele, and, till now, it seems to have been produced only in connexion with a flexion of the womb.

The non-encysted effusions of blood into the peritoneal cavity of the pelvis, owe their origin to the same sources as the hematocele, and may also be the result of a rupture of sub-ovarian varices. Six observations are reported where the accident was produced by an ovarian hemorrhage; in four cases *tubal hemorrhage* was the cause, and in three instances *reflux of the blood* originally deposited in the uterus. The influences which give rise to the development of varices in the veins of the ovary and the broad ligament, are the absence of protecting sheaths to these vessels, their vertical direction, former pregnancies, and the use of the corset. These vessels are not furnished with valves. The stasis in the right utero-ovarian vein is more common than in the left one, on account of its direct issue into the vena cava. In four instances a rupture in one of the veins has been observed. The fact that sudden death ensues in all cases of hemorrhage from this latter cause, may be explained by the following circumstances:—The blood is furnished by a large vessel, and the vessel once ruptured, is very little disposed to contract, on account of its varicose condition. Menstrual congestion alone would hardly be sufficient for a rupture of the veins, and indeed in almost all the cases reported there was an accessory cause, such as fatigue and sexual excitement.

The cause of the discharge of blood into the peritoneum, in a case of ovarian hemorrhage, is an imperfect attachment of the pavillon of the tube to the ovary, either in consequence of a detachment owing to the large amount of blood from the ovary, or that a perfect apposition is prevented by false adhesions or tumors. The "enkystement" of the blood is favored by the tardiness of the bleeding and the pure state of the blood, while the non-enkystement is dependent upon a large amount of blood, suddenly discharged, and from a previous alteration of the blood. The blood once in the peritoneal sac, soon gravitates towards the lowest point, the cul-de-sac behind the uterus. It here excites an exudative inflammation, and adhesions are formed between all the pelvic organs. The cavity of the cyst may remain unilocular, but in most cases it is traversed by a great number of thin fibrinous bands, so that it may appear to be located in the subserous cellular tissue, thus being mistaken for an extra-peritoneal hematocele.

The symptoms of a free hemorrhage into the abdominal cavity are those of a violent peritonitis with anemia. Death ensued in all cases in less than twelve hours. The occurrence of symptoms in a case of retro-uterine hematocele is variable, sometimes slow, sometimes rapid; abdominal pains during previous menstrual periods were observed in the greater number of cases. In sixteen cases irregularity or amenorrhoea were noted down, in one a menorrhagic disposition. The pain occupies one or the other of the iliac fossae, the pubic region, the lower part of the back, or even the inferior extremities. The pain has an expulsive character, or that of bearing down. In the course of the disease it disappears, to be renewed at some of the next menstrual

periods, even after the disappearance of the hematocele. The increased size of the abdomen is partly due to tympanitis intestinalis, partly to the pressure of a quantity of blood in the pelvis. The tumor, which may be felt in the abdomen, attains its highest development in the first few days, but in a few instances it increases in size for a month to come. The diameters of the tumor vary from those of an orange up to those of a full-grown child's head. The consistence of the tumor varies according to circumstances, at first it is soft, and becomes more solid and often nodulated (rugged) afterwards. The tumor may be easily perceived by the vaginal touch behind the uterus; in some cases fluctuation could be perceived, while the womb is displaced upwards or in a lateral direction. In a very limited number of cases a violet coloration of the posterior roof of the vagina could be perceived by the speculum. The vaginal neck is very generally unmovable and pushed towards the symphysis pubis and sometimes displaced towards the right or left side. The womb is only very seldom thrown upwards. In some instances a dysentery followed the disease, very likely in connexion with the rapid resorption of the liquid mass.

The course of retro-uterine hematocele is generally very rapid; its absorption is effected successively during the following menstrual periods; its duration takes four months as a general rule; perfect recovery is the rule in cases where no surgical treatment is resorted to and the tumor is absorbed, or it opens into the rectum or vagina. It very rarely opens into the peritoneal cavity, nor does its contents frequently become purulent.

The diagnosis of retro-uterine hematocele is based upon the generally large amount of blood discharged at the time of the menses, the connexion of the outset of the affection with the time of menstruation, the rapid course of the accidents, the resemblance of the symptoms to those of a peritonitis, the quick and enormous development of the tumor, the almost instantaneous appearance of anemia, the projection in front of the uterine neck, the presence of a retro-uterine tumor, and the character of the pains, which are compared by the patients to those experienced at the time of labor. In some cases it is possible to determine the primary cause of the affection, the source of the hemorrhage. The co-existence of varices in the lower extremities or the vagina, of hemorrhoids, and of an abundant menstrual flux make it probable that the bleeding comes from the rupture of a varix of the utero-ovarian plexus.

The pre-existence of lateral hypogastric pains with increased intensity every other month, alternating hemorrhages, previous pregnancies, rectal varices, and varices in the leg corresponding with the side of the hypogastrium, which is painful, are illustrative of an ovarian hemorrhage. A flexion of the uterus or an obstruction in the uterine canal indicate that the blood was furnished by the uterus itself. The diagnosis of a tubal hemorrhage is impossible. Diseases which might be mistaken for hematocele are: peritoneal phlegmon, retro-uterine abscess, oophoritis, enccephaloid tumors, ovarian cysts, tubo-ovarian cysts, extra-uterine pregnancy, fibrous tumors of the uterus, retroversion and retro-flexion of the uterus, varices of the broad ligament, thrombus of the broad ligament, retention of feces, and plastic indurations behind the uterus. The diagnostic features of all these accidents are considered briefly. Hitherto there has not been a single fact published that

proved the extra-peritoneal seat of hematocele, and it has been demonstrated by numerous autopsies, that the sanguineous tumor is always situated intra-peritoneal.

The *prognosis* of hematocele is generally favorable, except in those cases where pus is formed, or where the decomposed contents of the sac are ruptured into the peritoneum. In one case the patient became pregnant afterwards and was delivered of a healthy child.

Treatment.—The tendency to a new hemorrhagic attack must be treated by absolute rest in a recumbent position, local applications of cold, astringent remedies, acids, and revulsives. The tumor must be treated by cataplasms, flying blisters and derivatives; the anemia, by iron, tonics, and generous food. The surgical treatment resulted in death in one-fourth of the cases. It ought to be restricted to those instances where a strong tendency to decomposition of the encysted blood and perforation into the peritoneum is to be dreaded. The history of thirty-five cases is added. In conclusion, we give it as our opinion that Dr. Voisin's treatise will become the standard work on hematocele. It contains all that is known up to the present day on the disease in question; it reveals an admirable knowledge of literature, and is particularly valuable on account of the large number of observations contained in the appendix. We can hardly recommend it sufficiently strong enough to our readers. The only remark we venture to make regards the division proposed in the description of the disease. The free discharge of blood into the abdominal cavity is treated of apart from hematocele, properly so called, ostensibly on the plea that one cause of the accident, viz. rupture of a varix in the utero-ovarian plexus, would be always followed by violent hemorrhage, and consequently death, thus excluding the possibility of "encystment." In most instances this is the case, but it cannot be demonstrated that some of the cases which recovered were not hematocele, and were not originally due to a rupture of a varicose vein, inasmuch as a precise diagnosis of the several causes of hematocele is, in the majority of cases, out of the question during life.

E. N.

INSECTICIDES.—I have directed chamomile powder—that is to say, the flowers carefully dried in an oven, then powdered, to be dusted on the parts, in four cases, two of them children, infested by lice. I directed brown soap and warm water, liberally employed, twice daily, then the chamomile powder, previously confined in a muslin bag, to be well dusted in. The result in every case, and within a very brief period, was the destruction of these hideous parasites. —Dr. McCormack, *Dublin Med. Press.*

HEALTH OF LONDON IN THE 17TH AND 19TH CENTURIES.—To show the marked difference between the death-rate in the seventeenth and the nineteenth centuries, the Registrar-General has given us some very interesting details; and it appears that the comparison may be relied on as tolerably correct. In the 20 years, 1660–79, the death-rate was 7,000 in 100,000; in 1859, it was 2,229. Smallpox took off 357 in the first period, and 42 in the second; fever, 749 and 59 in the two periods. In those days, 86 died in childhood, now 17 die in the 100,000. Now 8 die of dysentery, then 763 died. Syphilis was twice as fatal then. Scurvy also took off its 142 instead of 2 as now. Respiratory diseases were very fatal; 1,079 then, against 611 now. Convulsions and teething carried off 1,175; and now (sadly still too many) carry off 136. Besides this, in those days there were visitations of the plague—in 1665, for instance, nearly one-third of the population perished by plague.—*Medical Times and Gazette.*

Progress of Medical Science.

SURGERY AND SURGICAL PATHOLOGY.

Practical Observations on the Nature and Treatment of Prostatorrhœa. By PROF. GROSS, Phila. (*North Am. Med-Chir. Rev.* July, 1860.)—Prostatorrhœa is defined to be a discharge from the prostate gland, generally of a thin mucous character, dependent upon irritation, if not actual inflammation, of the component tissues of that organ. It has generally been confounded with other lesions, as gleet, or chronic urethritis, seminal losses, and cystorrhœa, or chronic inflammation of the mucous membrane of the bladder. It does not often occur among children or old people, but is most common during the activity of the sexual organs, and is most frequently met with in those whose sexual propensities are the strongest. The exciting causes are not always evident, but the disease has generally been traceable, either directly or indirectly, to venereal excesses, chronic inflammation of the neck of the bladder, stricture of the urethra, or some affection of this canal; it may have its origin in diseases of the rectum, and the use of internal remedies, as cantharides, turpentine, may excite a temporary prostatorrhœa; a common cause in young men is masturbation. The *symptoms* are a discharge of mucus, generally, perfectly clear, ropy, varying from a drachm upward in twenty-four hours; in efforts at defecation the flow is greatest. It is attended, also, with a pleasurable, tickling sensation sometimes. Prostatorrhœa may be distinguished from urethritis by the gradual supervention of symptoms, the transparency of the discharge, the absence of symptoms of inflammation of the urethra, &c.; from spermatorrhœa, by a microscopical examination of the discharge; from cystorrhœa by the absence of changes in the urine, or difficulty in micturition. The *pathology* of this affection consists in a disorder of the follicular apparatus, leading to an inordinate secretion of its peculiar fluid. This may be due to inflammation, but in some instances the organ appears to be entirely healthy, in which case it is supposed to be due to a heightened functional activity. The *prognosis* is generally favorable, as this affection is not a disease but a symptom of disease, usually slight, and easily removed; it is often, however, very obstinate, and when the mind deeply sympathizes with the local affection is very difficult of management. The *treatment* should be directed to the removal of the cause, and to this end there should be a thorough exploration of the genito-urinary apparatus, the anus and the rectum, and a careful inquiry as to the habits of the patient. If he is weak, gentle exercise, nutritious diet, wine and tonics are indicated. The tincture of the chloride of iron in union with tincture of nuxvomica is especially recommended; if he is plethoric, the antimonial and saline mixture is useful; the most useful topical applications are cooling and anodyne injections, as Goulard's Extract with wine of opium in the proportion of one or two drachms each in ten ounces of water, three times daily; in obstinate cases, cauterization once a week may be necessary; the cold hip bath is also important, and if the symptoms do not yield, leeches should be applied around the anus and to the perineum.

Excision of the Head of the Os Brachii following a Gunshot Wound. By PROF. PAUL F. EVE, Nashville. (*Nashville Jour. of Med. and Surg.*, July, 1860.)—Prof. Eve remarks that, according to Mr. Birkett of London, in no case of excision of the head of this bone has the patient regained the power of raising the arm above a right angle with the trunk or above the level of the acromion. The case which he details was followed by a better result. The patient was sixteen years of age, and accidentally received a gunshot wound of the shoulder, the charge traversing the upper extremity of the os brachii and opening the shoulder-joint. There was but little hemorrhage. The operation consisted in making a flap of the deltoid, and thus exposing the shattered

head of the os brachii which was removed. The wound was cleansed and dressed, and the patient convalesced favorably. At the end of six months he had good use of the limb and was able to raise it to a level with the clavicle.

Statistics of Ligation of the Primitive Iliac Artery. By DR. STEPHEN SMITH, of New York. (*Am. Jour. Med. Sci.*, July, 1860).—This paper comprises the reports in abstract of 32 recorded cases of this operation, arranged according to the diseases or accidents which led to the operation, as follows:—1. For the arrest of hemorrhage, 11 cases. 2. For the cure of aneurisms, 16 cases. 3. For the cure of pulsating tumors, which proved to be malignant, 4 cases. 4. For the prevention of hemorrhage in the removal of a tumor, 1 case. Of these 32 cases, 25 died; being a mortality of 78½ per cent. In 24 cases aneurisms directly or indirectly led to the operation, and involved the following arteries; right external iliac, 11; left external iliac, 7; femoral, 1; gluteal, 2; one was varicose; not given, 2. In 17 cases the right primitive iliac artery, and in 13 cases the left was tied; of the former 3, and of the latter 2, recovered. In 9 cases the peritoneum was wounded, of which one recovered. It appears from this paper that the operation of ligating the common iliac is much more fatal than authors have represented.

Passage of a Rake Handle through the Scrotum and Abdominal Parietes—Recovery. By DR. BURNHAM, of Epping, N. H. (*Bost. Med. and Surg. Jour.*, July 12, 1860).—A laborer sliding down the side of a hay-mow encountered the upright handle of a rake, which entered at the lower or inferior portion of the scrotum, a little to the left of the mesial line, passing up over the pubes, then running somewhat diagonally across the abdomen, made its exit in the right hypochondriac region, between the tenth and eleventh ribs. The left testicle was completely turned out of its place and almost denuded of its covering. The rake handle was removed, no hemorrhage followed, and with the exception of an abscess, which formed in the track of the wound, the patient recovered without any bad symptoms.

Application of the Button Suture in Treatment of Varix. By DR. BOZEMAN, of New Orleans. (*New Orleans Med. and Surg. Jour.*, July, 1860).—The peculiarity of this method consists in using silver wire and the button suture instead of bougies. Dr. B. places his patient in the upright position in order to have the veins enlarge, and then passes the needle around it; the ends are drawn through the button which is slid down upon the vein and secured by compressed shot. Two cases are reported in which this method proved perfectly successful. Dr. B. has applied this method also to varicocele with success.

Compound Fracture of the Skull, with Depression of Bone and no Symptoms of Compression. By DR. RICHARDSON, of New Orleans. (*North Am. Med.-Chir. Rev.*, July, 1860).—Dr. Richardson reports the case of a man who entered Charity Hospital with a compound fracture and angular depression of the frontal bone but without symptoms of compression. Two small fragments of bone were removed through the laceration of the scalp, cold water dressings applied, and the patient rapidly recovered. Prof. R. states that this is his method of treating similar injuries, in opposition to British and American authorities. While the latter advise non-intervention when the fracture is not compound, Prof. R. contends that there is in such cases greater liability to inflammation than in a compound fracture, and therefore the argument in favor of not operating in simple fractures with depression applies with still greater force to cases of compound fracture with depression. He adds that it is a fact established by statistics, as well as by common observation, "that the number of persons who recover after compound fracture with depression, in whom the trephine is not employed, is far greater than of those who have been subjected to the operation." He refers to the following statistics of Lawrie and King, in the *Edin. Monthly Jour.* 1844, of 77 cases of compound fracture, 26 were not trephined and 18 were cured; 51 were trephined and 11 were cured.

Subnitrate of Bismuth in the treatment of Burns and Scalds. By DR. RICHARDSON, of New Orleans. (*North Am. Med.-Chir. Rev.*, July, 1860).—Dr. Richardson was induced to use bismuth in the treatment of burns from its well known effect in calming irritation and even actual inflammation of mucous membranes. The following is the method of employing it:—rub the bismuth in a mortar with a sufficient amount of glycerine to form a paste or thick paint, which should be applied to the affected surface by means of a camel's hair pencil, or a mop made of soft linen; the parts should be first thoroughly dried and each blister opened with a needle; after a thick coat has been applied the parts should be protected from the bed clothes by a layer of clean carded cotton. In burns of the first degree one application will often suffice, but in those of the second it may be necessary to repeat it, in part at least, from day to day, in consequence of its disturbance and the wetting of the cotton by the discharges. This method of treating burns has proved superior to every other in the Charity Hospital.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION.

SECTION ON SURGERY.

(Continued from page 35.)

Dr. WILLARD PARKER, of N. Y., remarked, in relation to the treatment of the disease in question, that inasmuch as it occurred in scrofulous children, the constitution was the main thing to be looked after; any local appliances being a secondary matter. The constitutional treatment required was sustaining in its character. If any apparatus could be suggested, by means of which the patient might avail himself of exercise, and at the same time keep the tender surfaces apart a great point would be gained. It seemed to him that Dr. Sayre's apparatus was the result of an old suggestion, and that due credit, as the prime mover in the affair, should be given to Dr. March. He thought that the principle of treatment, as laid down by that gentleman, was a correct one—the prevention of pressure, and the consequent destruction, not only of the synovial membrane, but the cartilage and bony structure.

In reference to the time for opening joints, he did not think it was a question that had been satisfactorily answered. He had some experience in puncturing knee-joints, though he never had occasion to perform such an operation upon the hip. In this connexion he thought it necessary only to refer to a single case of the former class, which might be considered as a type of the whole. It was in a young boy, ten years of age, whom he saw in consultation with a surgeon of New York City. The child at that time had been suffering intense pain for some days in consequence of pressure produced by an accumulation of fluid in the cavity of the joint, which had been the seat of acute synovitis. The pain was so intense, that the administration of opium and chloroform was found to be entirely useless, as far as any good effects were concerned. The question naturally enough came up—What was to be done? It was finally decided that an opening should be made. This was accordingly done by a thumb-lancet, when so great was the tension of the parts, that the fluid was forced to the extent of fully two feet from the aperture. The fluid, upon examination, was found to be of the nature and consistency of gelatine. The system soon afterwards became tranquil, and sleep followed the administration of an ordinary anodyne. In the course of time, a complete recovery was the result. He could not see the difference between joints which were already the seat of suppuration, where the synovial membrane and cartilage were destroyed; and ab-

cesses in any other part of the body. The indications for evacuation of the contents of the joint were equally strong in both instances.

Dr. ATLEE, of Pennsylvania, thought it was his duty to give his experience in relation to opening of joints, by citing the following case: The patient was a German servant of his, 18 or 19 years of age, with a highly scrofulous constitution. He was observed limping about the house, apparently in great pain; and on being questioned, he told the doctor that for some days he had suffered from severe pain in his knee-joint. Upon examination, the part was found very much distended, and his suffering was so intense, that it was evident that immediate relief should be given, or else suppuration would be the result. A small trocar was introduced, and about eight ounces of highly albuminous fluid was drawn off. The relief was immediate, and instead of having him laid up for three or four months, in three weeks after he was perfectly recovered. He stated, in conclusion, that previous to being compelled to perform the operation, he had always a prejudice against puncturing joints; but the result of this case tended to alter his views in relation to that point.

Dr. McDOWELL, of St. Louis, stated that he would have given all that he had ever made in his profession, and all he expected to make, if he had known of this instrument when his son had morbus coxarius. He should have punctured the joint early, then have applied the instrument, and would have been rewarded by saving his boy. In reference to opening into the knee-joint, he stated that he had performed the operation in four instances. In one case, ankylosis was the result; and in three others no serious damage took place. In conclusion, he expressed a determination to follow out the principles of treatment as set forth in the discussion.

Dr. F. H. HAMILTON remarked, in relation to the treatment of hip-disease, that he had been early instructed with reference to the necessity of confinement, but that experience had since taught him the unsoundness of such a principle. He had come to the conclusion, that such confinement was in direct antagonism to another and equally important indication, namely, the restoration of the general health. He maintained that, in a very considerable number of cases belonging to the incipient stage, the progress of the disease might be arrested by establishing or confirming the general health. If the child was past six years of age, this was not a very difficult thing to do. His plan was simply to instruct the parents to obtain crutches that were handsomely made of Malacca wood, and silver mounted, so that the child would not be ashamed of them, nor throw them aside when out among his playmates. By the adoption of these means simply, the patient would be tempted to take the requisite amount of exercise. To cases under the age referred to, he thought that Sayre's instrument was very well adapted. In reference to operations upon joints, he was convinced that there was not so much to be feared in opening them as in making that opening insufficient. He had resorted to the practice not only with impunity, but was satisfied with the result in every case.

Dr. JAMES R. WOOD, of New York, made in substance the following remarks:—The subject of opening joints has interested me for many years, and the opportunities offered for investigating the subject have been ample. The indiscriminate opening of joints is a very serious matter, but there are instances, where the experienced surgeon, by resorting to this practice, will do great good to his patients and credit to his calling. So great was the horror in reference to injury of the joints in days gone by, that even amputation and ligature of the femoral artery in puncture of the knee-joint has been resorted to by our best surgeons, and that within the last fifteen or twenty years. It was because of the resulting constitutional irritation, that this extreme practice was resorted to. I may be permitted here to offer a few thoughts on the different variety of cases in which the joint may be opened. The first is in those cases of traumatic trouble of the joint, where it is opened by puncture

as with a penknife, or as is not unfrequently the case, where this has been done, by a drawing-knife, in the hands of a cooper. This latter accident I have met with several times. These are the cases that were so much dreaded by the older surgeons. Here you have acute inflammation speedily terminating in acute abscess of the joint, and the sooner you allow the matter to escape by a free opening the better it will be for the patient; for by so doing, you escape the constitutional irritation and its consequences, also, the toxic effect from the absorption of matter. Again, as in the case related by Dr. Atlee, where you have the joint filling rapidly with serum, the result of a different grade of inflammation of the synovial membrane, producing excessive distension, excruciating pain, and consequent constitutional symptoms, because of the want of the elasticity of the tissues encroached upon, you are to make a small puncture as you would in the case of accumulation of serum or pus in the cavity of the thorax; close the wound at once and the relief is immediate. But let me be understood, that I would not resort to these practices in the cases instanced, unless the usual antiphlogistic treatment had been resorted to. I am convinced that it is good surgery, after they have failed, to open the joint as I have stated. Again, we have another form, and one which is very common, in our large cities; it is the result of a constitutional trouble occurring in badly fed patients, living in pent-up apartments, where the light of heaven and fresh air are seldom admitted; who are sustained by bad food and begotten by strumous or syphilitic parents. In this class of patients we have the disease called *fungus articularis*, by Sir Benj. Brodie, the old-fashioned *white swelling* of our fathers, no matter whether it occur in the hip, shoulder, elbow, knee, or the spine it is one and the same disease; and although the surgeon may do much, the medical treatment should never be forgotten, for without it all surgical appliances will be of but little avail. Give your patient good air, sea air if you can, plenty of light, out-door exercise as much as practicable, iron, wine, or ale, cream, roast and broiled meats, with blood-gravy, and so forth. In these cases, as a general rule, you have the integrity of the joint destroyed before you are consulted; a very different state of things from that existing in the cases already referred to. The synovial membrane, the cartilage of incrustation, and frequently the bone has succumbed to the peculiar grade of inflammation common to this disease. There is but little pain perhaps, but little heat, in fact the swelling about the joint and incapacity of use are the most prominent symptoms presenting themselves; if you exclude the constitutional trouble of the patient which it is not worth while to refer to here. As in the first form referred to, you have an abscess, but a very different one; in the first you have an acute, a hot abscess, but here you have a chronic or cold abscess. It is in all respects like the psoas abscess which occurs in the groin, or the lumbar in the loins. It is in these cases that I have occasionally opened the joints; but I am sorry to say, that my experience is such as to cause me to do it always with reluctance, and let me say here, Gentlemen, that it is my judgment that the good surgeon will always approach a joint with great deference and hesitancy. For even in this class of cases the majority of the patients whom I have operated upon, and those of my neighbors that have fallen under my observation, have either lost their limbs or their lives. Resection, although appearing much more formidable than the simple puncture of the joint, statistics warrant me in saying, is a very much more safe operation, and the results are very much more favorable.

Dr. TOWNSEND asked Dr. Sayre whether he would open the abscesses that occur upon the thigh in this disease?

Dr. SAYRE stated, that by the early use of his apparatus, and by following out the plan of treatment set forth, this complication would not take place. If, however, he should meet with a case where such an abscess existed, he did not see any reason why it should not be treated by a free incision as in any other instances.

On motion of Dr. Atlee, Dr. Sayre's paper was recommended by the section to the Association for publication in its Transactions. The meeting then adjourned *sine die*.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, MAY 23D, 1860.

E. KRACKOWITZER, M.D., President.

LARGE FIBROUS TUMOR OF UTERUS.

Dr. SANDS exhibited a specimen of very large fibrous tumor of the uterus removed from the body of an aged woman, who died from some cause unconnected with the development of the abnormal growth. After the removal of the mass it was with some trouble that the os externum was found, when it was seen to present very much its natural appearance. The canal of the cervix was somewhat increased in length, measuring about two and three-quarter inches. The cavity of the womb was also found to be much increased, having lost much of its original shape in consequence of the presence of several small tumors in the vicinity. The specimen on close examination was found to consist of a collection of tumors, each of them, however, connected together by pretty well marked fibrous tissue.

Dr. S. stated that he examined the specimens under the microscope with a great deal of care, in order to detect the unstripped muscular fibre which is said to exist in that variety of tumors. He however failed. The whole mass, after removal, weighed twenty pounds and ten ounces. In one or two places a calcareous deposit was found replacing what was formerly a fibrous mass.

Dr. KRACKOWITZER remarked that he had often examined such tumors in regard to the existence of the organic muscular fibre, but had never succeeded. He doubted not, however, that they did exist, and the failure in the detection of them, he was disposed to think, depended upon the previous preparation of the specimen. He remarked that Molleschott recommended the section to be placed for two months in dilute acetic acid (in the proportion of one volume of the acid to fifty-nine of water) when the fibres would be rendered visible under the microscope.

Dr. SANDS stated that he had seen it recommended by some one, to prepare the specimen in the first place by soaking it in dilute alcohol, and afterwards in dilute nitric acid, in the proportions as named by the President. He intended to follow out that plan and see what the result would be. In conclusion, he asked the experience of the members in reference to the earliest period of life that these fibrous uterine tumors were known to occur. He had a case under treatment of a young female, scarcely twenty, in whom he had very good reason to suspect the existence of such a state of things.

Dr. KRACKOWITZER believed that fibrous tumors in young people were of very rare occurrence; more generally showing themselves between the ages of thirty and forty years. These tumors gave rise to very little trouble, except when the female was impregnated, when they often were a serious matter. He stated that Spaeth, in one of the Vienna medical journals, published a case where a large tumor of that sort was attached by a pedicle to the fundus of the uterus, and at the time of labor occupied nearly the whole pelvic cavity, crowding the organ upwards, there being scarcely room enough left to introduce two fingers into the vagina. The mass, however, was pushed up into the abdominal cavity, the womb restored to its normal position, and the labor completed without any further trouble. The patient subsequently dying of puerperal fever, it was found that the tumor was about as large as a small head. Dr. K. referred to another case, published some time ago in which such a tumor was only recognised at the commencement of labor to reside in the anterior lip of the cervix, and whence it was enucleated in time to allow the parturient act to be completed in the usual way.

The Society then adjourned.

Medical News.

ARMY MEDICAL INTELLIGENCE.

By General Order No. 17, the following Assistant Surgeons to be Surgeons at the dates given.

Levi H. Holden, April 23, 1860, vice Wheaton, deceased.
Richard F. Simpson, June 23, 1860, to fill an original vacancy.

Richard H. Coolidge, June 23, 1860, to fill an original vacancy.

Chas. C. Keeney, June 23, 1860, to fill an original vacancy.

Robert Murray, June 23, 1860, to fill an original vacancy.

APPOINTMENTS.

Assistant-Surgeon Albert J. Myer to be Signal Officer with the rank of Major, June 27th, 1860, to fill an original vacancy. (Dr. Myer's commission as Assistant Surgeon is vacated.)

The following gentlemen are appointed Assistant Surgeons:—Joseph H. Bill of Pennsylvania, vice Eaton, deceased, to date from April 13th, 1860.

James H. Berrien, of Georgia, vice Holden, promoted, to date from June 1st, 1860.

Dewitt C. Peters, of New York, June 23d, 1860, to fill an original vacancy.

Charles H. Alden, of Pennsylvania, to be Assistant Surgeon, June 23, 1860, to fill an original vacancy.

Warren Webster, of Massachusetts, to be Assistant Surgeon, June 23, 1860, to fill an original vacancy.

John Vansant, of the District of Columbia, to be Assistant Surgeon, June 28, 1860, to fill an original vacancy.

Charles C. Byrne of Maryland, to be Assistant Surgeon, vice Simpson, promoted, to date from June 23, 1860.

Archibald M. Fauntleroy, of Virginia, to be Assistant Surgeon, vice Coolidge promoted, to date from June 23, 1860.

PERSONAL ORDERS AND MOVEMENTS.

Assistant Surgeon Warren Webster has been ordered to repair to Fort Larned, and report for duty at that station.

Assistant Surgeon C. C. Byrne has been ordered to repair to Camp Verde, Texas, and relieve Assistant Surgeon Foard.

Assistant Surgeon R. Bartholow has been ordered to report at Fort Columbus, N. Y., on the 16th of July, for duty with the recruits under orders for New Mexico.

Assistant Surgeon J. Vansant has been ordered to repair to the headquarters of the Department of Oregon, and to report for duty to the commander thereof.

Assistant Surgeon John Campbell has been ordered to Plattsburg Barracks, N. Y., on the expiration of his present leave of absence.

Assistant Surgeon A. J. Foard has been ordered to repair—when relieved from his present duties at Camp Verde—to Baton Rouge, La., and report thence by letter to the Surgeon General.

Assistant Surgeon Glover Perin, now *en route* to Ringgold Barracks from New Mexico, has been ordered to repair to Newport Barracks, Ky., and report thence by letter to the Surgeon General.

Assistant Surgeon E. W. Johns has been ordered to repair—when relieved from his present duties at Fort Larnie—to the city of New York, and report thence by letter to the Surgeon General for examination for promotion.

Surgeon W. J. Sloan has been assigned to duty at Baton Rouge Barracks, and will be relieved from further service in the department of New Mexico, on the arrival of Assist. Surgeon R. Bartholow in that department. On his arrival at St. Louis, Mo., Surgeon Sloan has been directed to report by letter to the Surgeon General for special instructions.

MEDICAL DEPARTMENT OF THE ARMY.

[Special Orders, No. 134.]

WAR DEPARTMENT,

Adjutant-General's Office, Washington, July 5, 1890.

A Board of Medical Officers will assemble at Baltimore, Maryland, on the twentieth day of September next, or as soon thereafter as practicable, for the examination of Assistant Surgeons for promotion, and of such candidates for appointment to the Medical Staff of the Army as may be invited to present themselves to the Board.

Detail for the Board: Surgeon C. A. Finley, Surgeon R. S. Satterlee, Surgeon C. S. Tripler.

By order of the Secretary of War, S. WILLIAMS,
Assistant Adjutant-General.

Applicants must be between twenty-one and twenty-five years of age.

Applications must be addressed to the Secretary of War; must state the residence of the applicant and the date and place of his birth. They must also be accompanied (references will receive no attention) by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the Medical Staff.

There are, at this time, three vacancies in the grade of Assistant Surgeon.

BROOKLYN CITY HOSPITAL.—By the death of Dr. Isaacs a vacancy has occurred in the Medical Board of this Institution, which will be filled by the Trustees in October.

UNION OF MEDICAL JOURNALS.—The *Cincinnati Lancet and Observer* and the *Cleveland Medical Gazette* have united their editorial interests, and hereafter these journals will be issued simultaneously at Cleveland and Cincinnati. Each retains its own name, but essentially they will be the same in size and contents.

AMERICAN HOMOEOPATHISTS AND THE BRITISH MEDICAL COUNCIL.—At the recent session of the General Council of Medical Education and Registration, five graduates of Homoeopathic Colleges of this country, viz. two from a Philadelphia and three from a Cleveland College, applied to be registered under a clause of the Registration Act, which admits graduates of Foreign Universities. The subject was referred to the Attorney General for an opinion as to the duties of the Council.

THE OHIO STATE MEDICAL CONVENTION recently met at Ohio White Sulphur Springs, and remained in session four days. Reports were made—on Surgery, by Dr. BAKER; on Obstetrics, by Dr. WRIGHT; on Obituaries, by Dr. LONDON; on Cannabis Indica, by Dr. McMEENS; on Medical Literature, by Dr. STEVENS; on Diseases of the Eye, by Dr. METZ; on Typhoid Fever, by Dr. POMERENE; on the Effects of Chloroform upon the Intellectual Processes, by Dr. WRIGHT. The following persons were elected officers for the ensuing year:—President, Dr. H. S. CONKLIN; Vice-Presidents, Drs. McMEENS, BONNER, KINGAID, HUNT; Secretaries, Drs. DAWSON, GUNDY; Treasurer, Dr. JOHN B. THOMPSON; Librarian, Dr. ROBERT THOMPSON; on Admissions, Drs. MULLEN, HURKTHAL, POMERENE, WALIER, MILLER.

COMMENCEMENT OF CASTLETON MEDICAL COLLEGE.—The exercises of the fifty-ninth commencement of the Castleton Medical College took place Tuesday evening the 12th, before one of the largest assemblies ever convened on a like occasion in Castleton, C. Spencer, President, in the chair. Diplomas were awarded to the following successful candidates for the title of M.D.:—S. Belknap, Vermont; M. Billington, New York; C. W. Bowen, Vermont; J. B. Chapman, Virginia; J. S. Crawley, New York; H. M. Hall, Illinois; A. J. Hart, Maine; G. H. Parkhurst, New York; J. C. Pomroy, Vermont; M. H. Searle, New York; W. H. Traver, Connecticut; E. A. Tupper, Nova Scotia; S. Weld and W. Scott, Canada West. Valedictory address by P. Pineo, M.D. The speaker was listened to with lively inter-

est, and the address was pronounced by all to be an instructive and valuable paper.

WEEKLY REPORT OF DEATHS IN THE CITY AND COUNTY OF NEW YORK,

From the 7th day of July to the 14th day of July, 1890.

Men, 77; women, 85; boys, 149; girls, 131. Total, 442. Adults, 162; youths, 7; children, 273. Males, 226; females, 216. Colored persons, 5. Increase over previous week, 11; corresponding week of 1888, 553; decrease, 111. Corresponding week of 1889, 597; decrease, 156. Of these, 227 were reported by the general names of acute diseases; 145 chronic; and 21 resulted from violent causes. 218 infants died under two years of age. Among the causes of death this week: From apoplexy, 10; congestion of brain, 9; cholera, 2; cholera infantum, 52; cholera morbus, 5; infantile convulsions, 50; croup, 4; diphtherite, 3; diarrhoea, 17; dysentery, 6; scarlet fever, 19; inflammation of bowels, 12, of brain, 11, of lungs, 15; measles, 2; small-pox, 5; consumption, 53; droopy of the brain, 17; marasmus, 24. The following is an attempt at a classification, viz.: Brain and nervous system, 105; Respiratory, 93; and Digestive, 143; Eruptive fevers, 26. Public Institutions, 61, viz.: Alms-House, 9; Bellevue, 19; City Hospital, 7; Island Hospital, B. I., 3; Lunatic Asylum, 4; St. Vincent's Hospital, 4; Ward's Island, 11.

WEATHER FOR THE WEEK.

JULY.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
8th.	29.88	.11	70	60	79	7	11	NE. to SE.	6	.04
9th.	29.78	.10	78	68	89	8	18	SE. to SW.	8	
10th.	29.86	.10	79	69	88	11	17	SW. to SE.	8	
11th.	29.98	.18	78	68	78	12	17	N.W.	25	
12th.	30.00	.08	72	64	80	13	18		25	.1
13th.	29.98	.05	68	60	77	10	13	NE.	2	
14th.	29.96	.04	73	60	82	10	15	NE. to SE.	1	

REMARKS.—8th. Fine day, with light winds. 9th. Shower at 6 A.M., morning damp. 10th. Fine day, wind fresh, A.M. 11th. Sunrise obscured, morning overcast, afternoon variable, wind light. 12th. Wind fresh A.M., day clear. 13th. Morning clear, shower at 3½ P.M., evening clear. 14th. Sky hazy in the morning, weather fine all day.

DEATHS.

WEST.—At Savannah, Ga., CHARLES W. WEST, M.D., Prof. of Chemistry in the Savannah Medical College.

BRODBECK.—On June 22d, at Dayton, O., CONRAD BRODBECK, M.D., aged 50.

WENDELL.—On July 11, at Brooklyn, MATHEW WENDALL, M.D., late Health Officer of that city.

MEDICAL DIARY OF THE WEEK.

Monday, July 22.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Elliot, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, July 24.	{ BELLEVUE, Medicine, Dr. Thomas, half-past 1 P.M. CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
Wednesday, July 25.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Sayre, half-past 1 P.M.
Thursday, July 26.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Loomis, half-past 1 P.M.
Friday, July 27.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, July 28.	{ BELLEVUE, Surgery, Dr. Church, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

Original Lectures.

CLINICAL LECTURE ON "PERINEAL SECTION" AND SYME'S OPERA- TION OF EXTERNAL URETHROTOMY.

DELIVERED AT THE NEW YORK HOSPITAL.

BY THOMAS M. MARKOE, M.D.,

ATTENDING SURGEON.

(Continued from page 39.)

As for the appreciation, as it is called by the French, of this operation, it must be evident to you that the success or failure of it depends so much upon the condition of the patient for which the operation becomes necessary, that the dangers of the operation itself can hardly be separated from those of the disease for which it is performed. Being a last and only resource for a desperate condition of things, we cannot select our cases, nor prepare them for operation. Accordingly we find, I am sorry to acknowledge, a good many of those operated on die, from infiltration of urine, peritonitis, hemorrhage, or pyemia, or other consequences either of the operation or of the disease for which it was performed. Besides those who die, there are also a certain number, in which the result is for various reasons unsatisfactory. The cicatrix of the stricture is as contractile or as irritable as before, and the patient not being willing or able to be under constant surgical care, soon gets into a condition no better than before, except that the perineal fistulæ left after the operation, are more direct and ready outlets for the urine than those caused by the original disease. A much larger proportion, however, and I only regret that I have no reliable statistics to refer to, are entirely cured by this operation; and the stricture, with ordinary care and attention, remains permanently dilated, while the fistulæ in perineo gradually contract and heal entirely. This I think to be the result of much the larger number of all the cases operated on by the perineal section, in this institution, and I think we may regard it as a very satisfactory exhibit of an operation, which is not one of complaisance, but one of necessity in desperate circumstances, that the proportion of deaths is comparatively small, and that in the larger number of cases the patients are entirely and permanently cured by it.

Having studied the history of, and the indications for, as well as the steps of the operation of "perineal section," let me now ask your attention to a similar sketch of the operation of external urethrotomy as practised by Mr. Syme. In the year 1844 Mr. Syme first introduced to the notice of the profession, an idea of his own, which was, that certain cases of stricture, even though they might be permeable to instruments, were better treated by external incision than in any other way. Previous to this, it had long remained a canon of surgery, that when any instrument, however small, could be passed into the bladder, the cure of the stricture could be effected by dilatation, and that cutting open the canal was not to be thought of. Mr. Syme, while acknowledging the general soundness of this surgical law, announced that there were some exceptional cases, which could not be cured in any other way than by external incision of the strictured parts, and as he has made good his point, and the operation has become an approved and an established one, it has received his name and is commonly spoken of as "Syme's operation." In bringing out his ideas on this subject Mr. Syme contended, that there were no strictures, through which a drop of urine could flow out, into which, by time, and care, and patience, an instrument might not be made finally to pass. This statement, as first announced, was not sufficiently guarded and defined, and it was received with great hesitation and disapprobation, and a vast amount of abuse was heaped upon the head of the

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Edinburgh professor, simply for having promulgated too strongly, and too unguardedly, what time and a more carefully studied experience has shown to be a sound and valuable surgical principle. It is generally conceded, then, that in a very great proportion of cases, even of the closest stricture, a small instrument can be passed by proper management, and it is to certain of these cases that Mr. Syme recommended his operation as applicable. You will see by the table given above that there are four classes of cases which are deemed to indicate and to require for their cure Syme's operation. Of these we have first,

1. *Contractile stricture.*—These are cases which every surgeon occasionally encounters, and which are a source of vast trouble and disappointment to the patient. They are characterized as a class, by yielding tolerably readily to dilatation, which may sometimes be carried up to the admission of the largest instruments, but as soon as dilatation is laid aside, the stricture contracts, and if a few days are allowed to pass without the introduction of an instrument, all that has been gained is lost. You know that there is in all old strictures a tendency to contract; this tendency is much exaggerated in these cases of which I am speaking; so much so that both surgeon and patient finally become weary of a process which does not carry them beyond a certain point, and of which, only to maintain that point, there seems to be no end. It was to a case of this kind, that, after having become wearied out with months of fruitless dilatation, Mr. Syme first applied his operation. He divided the contractile ring of this stricture, and had the satisfaction to find that as the parts healed, the contractility was gone, and the patient was cured. Since that first case, the operation has been repeated by himself and many others, and has now indeed been employed in a number of cases sufficient to show conclusively that it is an immense addition to our power of relieving this troublesome and intractable form of stricture, of which, in many cases, it is the only remedy.

2d. *An Irritable Urethra* is sometimes a serious embarrassment in the treatment of stricture by dilatation. Where this condition obtains we find that every introduction of the instrument is the source of immense pain and distress, the patient sometimes faints as it passes, or, more often, suffers so severely, that all his fortitude will not enable him to keep from shrinking away from the operation, often so as to defeat it entirely. Still more, in these cases of irritable urethra, the trouble is not confined to the moment of passing an instrument. A rigor, followed by fever, frequently follows each introduction of the bougie, which, though it is ephemeral in its duration, is nevertheless, by its repetition, a source of serious impairment of the health. The treatment of such a stricture by the oft-repeated process of dilatation must necessarily be unsatisfactory in the extreme, and to this class of cases Mr. Syme's operation is eminently suitable.

3d. *Extensive stricture.*—If a considerable length of the canal be involved in contraction, it becomes difficult to bring instruments to bear properly on the whole length of the ring, and even when dilatation is effected, these strictures, from the very extent of the parts implicated, are more liable to contract, and more difficult to be kept free by the occasional use of an instrument, than when a shorter portion of the urethra is involved. It is a condition generally associated with great thickening of the tissues round the stricture, and is most commonly found in cases of long standing, that have been subjected to a great deal of treatment, perhaps not all of the wisest kind. To many of these the incision will prove a perfect remedy.

4th. *Traumatic stricture.*—You are fully aware, by your observation of the cases treated here, that as a general thing we find more difficulty in the management of strictures of a traumatic origin, than in those which are the consequence of gonorrhœa. A man who receives a kick in the perineum, or falls astride of a board, is very apt to find blood trickling from his urethra, a few moments after the injury, indicating that a laceration of the mucous membrane has taken place. Now, if this laceration be considerable, and particularly if

the whole calibre of the canal be involved in the injury, you have, in the first place, a formidable accident to deal with in its immediate results of retention, extravasation, etc., and in the second place, one which, however skilfully you manage it, is almost certain to be followed by a contraction of the cicatrix of the injured part, which leads to a stricture. Now if there have been any considerable loss of substance at the injured spot, either from the original injury or by ulceration following it, then the stricture will become very close, will be exceedingly intractable to treatment by dilatation, and will manifest an obstinate disposition to return as soon as treatment is laid aside. This class of cases, by reason of their obstinacy and intractability, will afford many examples which can only be permanently cured by external urethrotomy, and as soon as their evil disposition has been fairly proved, it is good surgery not to delay the operation.

The operation itself consists in two parts, one of which is preparative to the other. The preparation consists in getting the stricture so far dilated that it will receive the instrument, by which the incisions are to be guided into the canal, and this part of the treatment is often the most tedious, and in one sense the most important. I have already fully expressed my views to you about the permeability of strictures, and I hope you are fully impressed by the conviction, that by tact, care, and perseverance, an instrument can almost always finally be got through. Be your views however what they may, if you propose to perform the operation we are studying, you must first secure the passage of a guide or you are reduced to the necessity of the "perineal section," and I hope to show you that the superiority of Syme's operation over the "perineal section" is so great and so essential, that you will rightly appreciate the importance of this preliminary process, and cultivate carefully the skill and dexterity which will enable you to succeed, wherever success is possible. Having succeeded in your preparative treatment, the first step in the operation proper is the introduction of the guide. I here show you the instrument contrived by Mr. Syme for this purpose. It consists of a full-sized grooved staff similar to the ordinary lithotomy staff, excepting at its extremity. Here you see that the end of the instrument, instead of terminating in a rounded blunt end, has a prolongation of about an inch, which prolongation is itself a grooved staff of a much smaller calibre than the body of the instrument, the groove of the larger and the smaller portions being continuous. This instrument is introduced, and carried down to the stricture, which has previously been dilated so as to receive the small end of the staff within its ring. Of course the larger portion of the staff will not pass into the stricture, so that you have, when the instrument is properly in place, the small grooved portion lying in the stricture, while the large grooved portion occupies the urethra in front of the stricture, with this smooth rounded shoulder pressed against the anterior face of the constriction. This being fairly accomplished, the rest of the operation is extremely simple and easy. With the finger on the integument of the perineum, we can feel exactly the position of the shoulder of the staff, and therefore of the stricture against which we know that it presses, and our incisions can be made directly upon the constriction. It is generally best to open the urethra a few lines in front of the stricture, and then passing a fine knife into the groove of the staff, carry back the dissection so far as entirely to divide the constricted ring, and in order to make all sure, Mr. Syme advises to go a little beyond the stricture, both before and behind, cutting a few lines of healthy tissue, rather than leaving any of the stricture tissue undivided. You can easily see, that this procedure involves very little more than the cutting of the stricture and its coverings, the deep and tedious dissection of the "perineal section" being avoided, the deep perineal fascia being but slightly involved, even where the stricture is at the posterior part of the membranous portion of the urethra, and where it is further forward not being touched at all. The incisions being completed, a full-sized instrument is passed along the whole course of the urethra into the bladder and secured in the

same manner as after the perineal section. In the after treatment of the case, the principal thing to be cared for is to cause the wound in perineo to heal by granulation, and not by first intention. The object of this is, that the divided urethra shall be closed by the deposition of new matter in the shape of a cicatrix, which new matter, by being kept dilated by the occasional introduction of a large instrument, soon loses its tendency to contract and the calibre of the canal is entirely restored. Mr. Syme insists very strongly on this point of after treatment, and details many cases corroborative of the correctness of its pathological explanation. One in particular he mentions, of a man on whom he operated, and who recovered so well as not to require the introduction of an instrument after he left his care. The patient lived several years, following the occupation of a wrecker on the coast of Scotland, and when he died Mr. Syme was so fortunate as to have an opportunity of dissecting the parts. He found the urethra at the point of operation rather larger in diameter than at any point in front or behind, and this although no instrument had for years been introduced. The instrument, after this operation, need not as a general rule remain in longer than forty-eight hours. It may then be removed and occasionally introduced during the healing of the perineal wound. The sides of this wound, in pursuance of the idea above suggested, must be occasionally separated by the introduction of a probe to prevent immediate union of the granulations. Very soon after the removal of the instrument the patient may be allowed to leave his bed, and in favorable cases, in a fortnight or three weeks, he will be well enough to be about his affairs.

In the appreciation of this operation, we have the assistance of statistics, which if not founded on a very large number of cases, embrace a sufficient number to be in the main reliable. Out of two hundred and nineteen cases collected by Mr. Henry Thompson, the mortality was only fourteen; and of these four were complicated with serious organic disease of the kidney. If these cases, in which the death was not due directly to the operation, be deducted, we have a mortality of a little less than six per cent.; a percentage of death which, when we consider that many, if not most, were hospital cases, will compare favorably with any of the most trivial operations that are ordinarily performed.

I have thus passed rapidly in review the principal features of these two important operations. If I have succeeded in making my remarks intelligible, I think you will be able yourselves to compare them in their main points of contrast and resemblance, and my most prominent object will be answered if I have enabled you more clearly to understand the numerous operations for stricture, which, during the past few months, you have witnessed in this institution.

He must be short-sighted indeed who can fail to see that sailors occupy a position of influence and importance in the world, which is possessed by no other class of equal number—and he must be indifferent to the general diffusion of Christian civilization who can regard them with unconcern. Their wandering life is little fitted to foster virtuous principles. They usually exile themselves from home influences at a comparatively early age. Vice, painted in its most glaring hues, meets them at every step on shore—and thousands of both sexes lie in wait to plunder and corrupt them. It is estimated that there are about 200 boarding houses kept exclusively for seamen in the city of New York; about 30 of which are, besides, houses of prostitution, and in all of which, save, about 12 or 15, liquor is sold. The annual arrivals of seamen in this port are supposed to amount to about 200,000. This vast army of men, composed very largely of foreigners, has in it a very small—though increasing number of truly pious men. The great majority, especially of the young, fall an easy prey to the wiles of the "Land Sharks" of both sexes, who waylay them at every turn, and live and grow fat off the vices of their victims.—*Dr. Moffatt's Annual Report of Seaman's Retreat, 1859.*

Original Communications.

REPORT OF THE CASES OF FRACTURE OCCURRING IN PRIVATE PRACTICE,

WITH OBSERVATIONS UPON TREATMENT.

BY DAVID P. SMITH, A.M. M.D.

OF SPRINGFIELD, MASS.

(Continued from page 48.)

Cases 6 and 7.—Simple fracture of tibia that occurred without any unusual symptoms.

SEVEN CASES OF FRACTURE OF TIBIA AND FIBULA.

Case 1.—June 12, 1854. I saw —, who told me that he had broken both bones of one leg a fortnight previously. I removed the dressing then upon it and placed it in a Goodwin's carved splint; the next day he had a severe epileptic fit, in the course of which he tore his limb from the splint and drew it up under him. On inquiry it was found that he was subject to epileptic fits, which left him quite delirious for some time after their occurrence. I made strong extension and counter-extension, and pressing the bones into their places applied a copper half-boot on the outside of the limb, with a pasteboard on the inside, binding them on firmly with a roller bandage. Very soon after this he had a severe attack of measles, but notwithstanding these mishaps the bones were firmly united at the end of three weeks, there remaining no trace of deformity.

Case 2.—Sept. 30, 1857. Saw J. M.—, who, four or five weeks previously, suffered fracture of both tibia and fibula; there appeared to be little or no union, and some overlapping or rather lateral displacement of the bones. With the concurrence of Drs. Rice and Kibbe, I applied Jarvis's adjuster. At my next visit, October 7th, there did not appear to have been any benefit derived from its application. It had broken up what little union had taken place, and still complete approximation of the ends of the bones could not be obtained. Dr. Rice suggested, what proved to be correct, that a small fragment of bone between the ends prevented their approximation. The limb was now placed upon Goodwin's splint, and Jarvis's adjuster continued. Great swelling followed the application of the counter-extending band, and necessitated its removal. Union slowly took place. At the end of about sixteen weeks from the occurrence of the fracture I bound upon it a copper half-boot, and directed him to move about on crutches. Union became firm at the end of eighteen weeks.

Case 3.—Sept. 9, 1855. A boy, about six years old, broke both tibia and fibula by getting his limb into the spokes of a wheel in rapid motion. It did very well and united without deformity. It was treated upon Welch's and Seymour's double inclined plane.

Case 4.—29th Sept. 1855. M. M. Chandler received a compound and comminuted fracture of tibia and fibula about three inches above the ankle, complicated with simple fracture of tibia near the knee; the ankle joint was laid open by a gash extending across the whole inner side; the laceration and bruises were so great that hemorrhage continued for three days; one half of the integument on the outer and inner face of tibia sloughed, as also the whole integument and cellular tissue of the sole of the foot. The limb was placed, immediately after the accident, in the swing splint invented by Prof. N. R. Smith, of Baltimore. The edges of the contused wounds were loosely approximated, a bandage applied from the toes up so as to moderate the hemorrhage, and arrangements were made so that a stream of cold water was kept continually trickling down upon the limb; opium was given in doses sufficient to allay all irritation. For a week the issue was doubtful; a large and ex-

tremely fetid abscess formed in the sole of the foot; gangrene seemed impending, and it was only by the most assiduous care that I was enabled to prevent its access; the discharge was very great for two months, and necessitated a renewal of the dressings two or three times daily. The limb was so nearly deprived of all vitality that the heel suffered greatly, and necessitated frequent modifications of the apparatus; at the end of that time, six months, he recovered a perfectly serviceable limb. Small pieces of bone were from time to time discharged, but at the end of eight months nothing remained to mar the beauty of the cure but the attenuation and stiffness of the muscles, which daily grew less and less.

Case 5.—Nov. 19th, 1857. Mr. —, in a fit of delirium, at the commencement of the second week of typhus fever, at about 5 o'clock, A.M., threw himself from a third story window upon a brick pavement, fracturing the left tibia transversely just above the ankle, and the right tibia and fibula obliquely at the junction of the middle and lower thirds. There was no displacement in the left limb, but powerful extension was required to reduce the fractures in the right limb. This being accomplished a copper half-boot splint was applied to the outside and a wooden splint to the inside, both being well padded. The delirium, of which there had been no symptoms till an hour or two before the accident, subsided soon after. There were slight returns of it at about the same time the next morning, and it continued to recur daily, and with increased severity till the 26th, when it became impossible to keep the limbs still. The dressings became loose, and there was constant motion of the fragments of the right limb upon each other. The splints and dressings being re-applied a kind of cradle was arranged to receive the limb, and suspended from the ceiling by four cords in such a manner as to allow of flexion and extension of the knee joint without displacement of the fractures; but was not sufficient to keep them in position as the patient turned from side to side. To obviate this difficulty a cord was passed over a pulley at the ceiling, to each end of which another pulley was attached, over which two other cords were passed, the ends of which were attached to each extremity of the cradle on both sides. This contrivance answered the purpose perfectly. Notwithstanding the constant and extensive motions of the limb in all ways but little pain was experienced apparently, and the fragments of the bones were never found displaced. For a day or two previous to his death the delirium was almost constant, the patient often turning from side to side in bed and drawing up and extending the limb with great quickness and force. Death took place on the 31st. On post-obit examination there was no evidence of undue action about the fractures, which must have hastened, if they did not decide, the fatal event."

Case 6.—Dec. 20, 1858. Mr. C— broke tibia and fibula by a fall on the ice. The fracture was at the juncture of the middle and lower thirds, and required great force to reduce it. A copper half-boot on the outside and a wooden splint on the inside of the limb kept the bones perfectly in place. Union occurred in about twelve weeks.

Case 7.—Simple fracture of both bones; though much displaced and resisting manual force, was finally perfectly reduced by the use of the tourniquet as afterwards explained. He was transferred from my care to a hospital and from thence to the almshouse. When I last heard from him the bones had not united, probably in consequence of his intemperate habits.

SIX CASES OF FRACTURE OF THE FIBULA.

Case 1 was a complete fracture of lower end of fibula.

Case 2.—22d May, 1858. Mr. C—, alighting from his wagon, by a misstep fractured the fibula about four inches above the ankle, and dislocated the foot outwards; the internal malleolus projecting through the skin to a considerable extent. The dislocation was easily reduced, and, although he was a tippler, and subject to rheumatism, no

trouble was experienced in the after treatment. A copper half-boot was kept applied until July 10th.

Cases 3 and 4 were cases of simple fracture of fibula requiring no comment.

Case 5.—Oct. 26, 1858. Mr. T— was thrown from his wagon, and fractured the fibula and internal malleolus, and also received a very severe laceration of the scalp, which was not only torn open for about eight inches, but also scraped from nearly all of one parietal bone. I brought the edges of the wound together with silver sutures, dressed the fractured limb with side splints, and took him immediately home. Forty-four hours afterwards found him very comfortable, complaining of nothing, and wound of scalp uniting by first intention. He was carefully attended by the neighboring physician, Dr. Hamilton, and after about ten days' severe illness rapidly convalesced.

Case 6.—Simple fracture of fibula requiring no note.

General Remarks on the foregoing Cases.—The self-evident principles that should be kept in mind during the treatment of any and all fractures are—

1. When the principal bone of a limb is broken apply externally apparatus that shall, like the shell of the crustacea, afford external support without impairing the functions or seriously inconveniencing the tissues of the limb.

2. When extension and counter-extension are required keep the limb at its normal length by the friction of, as large as possible, parallel surfaces, and not by a dead push perpendicular to the skin and underlying tissues. In fact the only parts of the human body that are physiologically capable of such pressure are the tuberosities of the ischia, and the soles of the feet. We all know how beautifully Mr. Syme has taken advantage of this property of the sole.

3. The limb should be so situated as to afford every facility to the surgeon for examining the seat of fracture without the least danger of disturbing the uniting surfaces.

4. In order to preserve perfect immobility of fractured surfaces the splints should not be very heavy, neither immovably fastened, but should be free to move with the rest of the body; so that, even in the wildest delirium, the fragments will not suffer displacement.

5. The fractured limb should be so disposed of, that there may be as little interference as possible with the healthy performance of all the functions of organic life.

6. When the fracture is properly adjusted there should be as little need as possible of readjustment.

The treatment of fractures of the thigh will first claim our attention. Fracture apparatus has, for a long time, claimed much of my attention; I have expended a good deal of money in the purchase of various splints, and have used them with many modifications of my own; yet for the last few years I have felt very sensibly the want of an efficient thigh splint. Every suggestion from books, and every practical lesson from the cases under treatment have been carefully heeded. It has appeared to me important that more care should be exercised in the adaptation of splints to the surface of the body; that the best material for a given purpose should be carefully sought for, and no part of the necessary detail of adjustment hastily passed over. So small a matter even as the deciding what is the best material for pads has taken some time and a good many trials to decide its value. I have made free use of the labors of others in this department, and have appropriated whatever seemed meritorious wherever found.

The results of my study and experience have led me to adopt the following dressings in all fractures of the shaft of the femur: I retain the long splint of Desault, of a length sufficient to reach from below the heel to the crest of the ilium; the width of this should be four and a half inches throughout its whole length when used for an adult. My smaller sizes are four and three and a half inches wide, the thickness should be one-half inch; it should be made of white pine so as to avoid great weight. A similar splint is placed upon the inside of the limb, reaching from beyond the heel to the perineum. A wooden bar, one foot long,

two inches broad, and one inch thick, passes through the lower extremity of each splint in a mortise that allows of free motion; a stout iron rod is screwed on to the outer splint just opposite the perineum, and rising vertically for two inches above the splint, then bends, at a right angle, and crosses the splint horizontally; the inner end of it which will come just above the perineum is intended for the point of attachment in front of the perineal band. The other end of the perineal band is attached to the outer surface of the long splint by means of a button or thumb-screw, a little lower than the upper extremity of it, so that it may exactly grasp the tuberosity of the ischium.

After trials of various substances for pads, I find that clean wheat bran fulfils the requisites perfectly. This, enclosed in bags of cloth, should be interposed between the splints and the limb. If there is reason to believe that the perineal band, which should be so placed as exactly to traverse the tuberosity of the ischium, will gall, strips of adhesive plaster extending down the thigh, kept in place by the pressure of the bran pads, and attached to the upper end of each splint, might be used as auxiliaries to the counter extending band. A belt should be passed around the body just below the crest of the ilium, and snugly and firmly buckled, so that, if need be, it may furnish some counter extending force. I attach the head of the outer splint to this belt by means of a small strap passing through two holes in the splint. This strap can be tightened or loosened to suit circumstances. The splints should be attached to the limb by means of the sling bandages used in the New York Hospital which, passing around the back and up the sides of the limb, are reflected back upon the splints, and passing entirely around them are tied in front; thus furnishing an easy sling support for the back of the limb, as well as a bandage of application. My bran pads are fifteen to eighteen inches long, four and a half inches broad, and two inches thick at one end, and tapering like a wedge to the other end. The material is called wheat skins by millers. When the splints are applied by a little manipulation the pads can be easily shaped so as to exactly fill up any inequalities between the opposing surfaces.

When a fracture of the femur occurs just below the trochanters or just above the condyles, we should approach the case without prejudice in favor of a straight or flexed position; and gently, so as to avoid spasm, endeavor, by manipulation, and moving the limb, to ascertain in what position the fragments will be most inclined to lie in apposition. Fortunately Dr. S. H. Skinner's double-inclined plane splint, furnishes us with the means of availing ourselves of the flexed position, if need be, and at the same time of keeping up any required amount of extension. Then again, as I have before intimated, by raising the foot of the bed three or four inches, and attaching weights to the foot of the splints by a cord passing over a pulley, we can relieve, to a very great degree, the perineum from any galling. In this mode of dressing also the sitting posture can be indulged in with impunity.

This method of dressing does not involve the substitution of one plan for another, but comprises the effectual modifications, simplifications, and auxiliaries that I have been describing, all brought into harmonious concert. My set of ten outer and ten inner splints, varying in length and breadth, so as to suit any age or size, all with the same size of mortise can be made by any one, and costs but very little. Three or four of them can be carried anywhere with ease, and are infinitely superior, in all points of view, to those heavy oak and iron abominations, with screws and crutch-heads, that every surgeon seems to think it his express duty to invent. It is far more economical to expend one dollar for a dozen pine strips varying in length from three to four and a half feet, and in width from three and a half to four and a half inches; all one-half inch thick, and all with auger holes at one extremity and one uniform oblong square hole at the other for the same crossbar—than it is to spend five, or ten, or even, as we now have the opportunity, forty dollars, for a splint, the sole advantage of which is that by turning a screw here

or there, or touching some complicated spring arrangement at this or that end, it can, *mirabile dictu*, be lengthened to suit the case. Country practitioners have yet to learn that it is just as convenient to carry a dozen light pine strips as it is one heavy oak and iron machine. A width of splint sufficient to prevent any circular constriction, and sufficient at the same time to prevent inversion or eversion of the foot, is also highly important. This appears to have been almost entirely overlooked, and I have seen several drawings where the long splint is represented as being very narrow, as if to give room for the introduction of a highly ingenious and complicated foot-piece. A useful appendage to my set of splints would be two or three iron brackets, so that, in case of a compound fracture, they could supply the place of the splint directly over the wound, and allow it to be readily reached.

When dressing a limb in this manner I should proceed thus:—

1st. Draw under the limb eight or ten strips of strong muslin bandage seven feet long, arranged at equal distances from each other the whole length of the limb.

2d. Cut a strip of adhesive plaster one and a half inches broad, and long enough to reach from the knee around under the sole and up to the knee again, leaving an inch loop below the sole. To the middle of this strip, upon its plaster surface, apply a wider strip, plaster to plaster, so that the strip may not adhere to the ankle or foot at all, but only to the leg. Thus, carefully bandaging the foot and ankle, apply the plaster strip on both sides of the limb under the bandage, taking care that the two sides are perfectly parallel. Place in the loop a bit of wood one and a half inches broad, and long enough to take off all pressure upon the ankle. The cross-bar of the splint should come about four inches below this.

3d. Apply to the limb from the point of fracture upwards to the perineum on one side, and to the trochanter major on the other, adhesive strips three inches broad, with ends long enough to tie through auger-holes in the heads of the two splints. These are kept in place by the pressure of the bran pads and *not by a roller bandage*.

4th. After throwing the outer ends of the bandages across the front of the limb, out of the way, apply an outer splint of length sufficient that its mortise for the cross-bar may be four inches below the loop of plaster and its uppermost extremity just opposite the crest of the ilium. Apply carefully the bran pads so as to fill up all inequalities.

5th. Apply the pelvis belt, perineal band, and screw on the iron cross-bar; also tie tightly, through the holes made for the purpose, the upper ends of the counter-extending adhesive strips.

6th. After throwing the inner ends of the bandages across the front of the limb, apply the inner splint with its pads; run through the cross-bar, tie the upper ends of the counter-extending slip on the inside of the thigh; buckle on the tourniquet.

7th. Now make gradual extension by the tourniquet. After examining everything to make sure that the counter-extension is equally distributed, finish by drawing up the bandages so that the back of the limb may be properly supported, reflecting their ends around back, outside of the splints, crossing them behind and tying them in front.

Splints can of course be applied to the back or front of the limb if required, but I think their utility is questionable.

It has been claimed by some great though eccentric minds that extension and counter-extension are useless, and that there is not that danger of shortening, and impairment of function resulting therefrom, that is generally believed. There are unquestionably transverse fractures that require no extension, and again fractures near and into joints, complicated with laceration and straining of fibrous tissue, that will not bear, and would not be benefited by, extension. These, however, are plainly exceptional cases. No one rule can be laid down applicable to all cases. In the case of an oblique fracture of the tibia and fibula, *position* may be competent; if it is not, shall we be justified in allowing

the patient to recover with a shortened limb because the theory of some surgeons is that you cannot prevent it? I think not.

Let us then view the limb after the dressing upon this plan has been completed, and see what is its condition. The whole upper part of the limb is exposed to view, the whole of the under part is easily reached by the hand without any derangement of the dressings. Perfectly equable sidelong or transverse pressure is made upon the sides of the limb, the parts most able to bear such pressure, by the straight splints through the intervention of the bran-pads. If pressure falls too heavily upon any prominent point, such as the condyles of the femur or the malleoli, a little manipulation of the bran-pad will change its form as desired. The adhesive straps, kept in place by the pressure of the pads, furnish extension and counter-extension by friction of opposing surfaces of large extent, so that not only is all danger of excoriation but all constricting bandages around the limb with their attendant disadvantages are avoided. I allude altogether to the bad effects produced by the tightness of a bandage usually applied around the upper part of the fractured limb to form the *point d'appui* for the counter-extending force; when employed with Jarvis's adjuster I have known it produce great infiltration and swelling of the limb. As is well known, a bandage from the toes upwards may sometimes be absolutely necessary to prevent spasm of the muscles. It seems to me that straight splints used after this manner, with suitable pads to make equable pressure, and adhesive strips to keep the limb to its normal length, are exactly similar in their action to splints elaborately carved and precisely fitted; in other words, that the adhesive straps furnish all the extending force that would be furnished by the accurately fitting surfaces of a splint carved to exactly the form of that particular limb, and so perfectly fitted as to adhere by atmospheric pressure; or again, that splints thus disposed are as effectual as the shells of the crustacea to preserve the normal shape of the limb. There is another advantage pertaining to this apparatus, which is this. If it is desired to move the splints from the sides of the limb it can be done by merely sliding them upon the bar connecting their lower extremities without the slightest danger of disturbing the fracture. The extending forces remain the same, and perfect facility of dressing any sore or bruise is afforded to the surgeon. The lightness of the whole apparatus adds greatly to the ease of moving the patient, and contrasts favorably with the ponderousness of many of the machines like Jarvis's Adjuster, &c., &c.

The width of the splint, four to four and a half inches, is according to the views of Mr. Syme, who says that it is the most effectual method of preventing eversion or inversion of the foot. The cheapness of the form of dressing I advocate ought not, I think, to be taken into consideration; for if costly apparatus added anything to the comfort of the patient, or furnished any more security for the future usefulness of the limb, I should deem it my duty to procure them. But I have found them wanting, and I now believe, as I have before stated, that error in the original conception is the cause of the complication of detail in all fracture apparatus.

The adhesive plaster can either be used in the form of straps, as already described, or it can be wound like a bandage around the splint and pad, so as to present an adhesive surface wherever the pad and limb touch. A cloth spread over the outer surface of the splints would prevent adhesion to the bedclothes. This method I have pursued in fractures of the upper extremity with great benefit. In the case of a child, or of any person where great restlessness was to be feared, I should be inclined, after adapting the splints and pads carefully to the inequalities of the limb, to wrap about them adhesive plaster, with the adhesive surface next the limb. This would furnish very perfect extension and counter-extension by friction of opposing surfaces. Of course a little cotton cloth would prevent adhesion of the plaster to the bedclothes. To prevent any excoriation of the heel from its own weight, it would be well to place a

wedge-shaped pad, filled with sand or bran, under the calf extending to just above the heel. If we have reason to expect much discharge or bleeding I should wrap all the padding in oiled silk.

The apparatus now presented is capable of many modifications by which it may be made to suit the exigencies of any case. For instance, 1st. The inner splint may be made of unoled sole-leather or gutta percha, formed like the wooden one, only one and a half inches broader. The cross-bar with the tourniquet being made to rest wholly in the mortise of the outer splint, the inner splint, whether of gutta percha, leather, or felt, can be most thoroughly adapted to all the inequalities of the limb, and then allowed to harden as hard as a board, before being used as a means of extension. 2d. After cushioning the upper extremity of the inner splint with as many thicknesses as need be of flannel, and placing the cross-bar only in its mortise, forming thereby an exact copy of Sir Astley Cooper's thigh splint, we can also adapt perfectly an outer splint of similar material, and allow it plenty of time to harden before using it for extension. 3d. After dressing the limb with its two side splints, we can apply to the skin of the anterior surface of the thigh and leg a piece of gutta percha three or four inches wide, reaching from the last rib to the end of the toes. Thorough moistening in hot water will render it so pliable that it will adapt itself very perfectly to the slightest inequalities of surface, and become an excellent anterior splint; an invaluable resource in case the side splints become irksome and cannot be borne. Sole-leather and gutta-percha splints applied in this manner furnish, *perfectly fitting*, strong and inflexible supports, or rather outside bone-shells, to the limb, which may be worn for weeks by the aged and infirm, as I have proved in actual practice, without even a discolouring of the skin, much less excoriation. It needs no argument to convince any one of their value. If the counter-extending force should fret the patient it would be well to raise the foot of the bed four to six inches, and, removing the tourniquet, attach a weight of from two to six pounds to the adhesive strips by means of a cord passed over a pulley in the foot-board. The head and shoulders might be raised by pillows to any height required for comfort. In this way very powerful extension can be made without any pressure on the perineum. Inasmuch as the adhesive straps render extension easy to be borne, and, on the contrary, counter-extending force is still, with all our improvements, borne with the most difficulty; I would advise, in all cases of very oblique fracture, raising the foot of the bed an inch or two, and the attaching a weight to the *foot-bar of the splint as an auxiliary force*.

My experience in fractures of the bones of the leg has taught me that, while no one treatment is suited to all cases, there are a few procedures still advocated and taught that should be avoided if possible. I say *if possible*, because the difficulties of adjustment may compel us to choose between certain deformity or hazardous expedients. Thus, Jarvis's adjuster, of great service in case eight, was of none in case sixteen. The ulcer on the heel occurring in case ten, was to be attributed more to the feeble vitality of the limb than to the pressure of the splint; still the leg might have done a little better on the side after the sloughs were detached. I think the great care and many visits required by case fourteen would have been materially diminished had the limb been strung up with the heel a little higher than the knee—an approximation to the position given in a case of fracture of the patella by Prof. Hamilton in his excellent work on fractures—and, after raising the foot of the bed four or five inches, attaching to the splint a weight by means of a cord passing over a pulley at the foot of the bed, so placed as to make the line of traction in a line with the tibia. In this manner we get the exact position required by those fractures that, occurring at a varying distance from the knee joint, have the line of fracture directed obliquely downwards and forwards; we also have the extension and counter-extension furnished by the straight splint if we use Skinner's apparatus, and again, the extension of

the weight over the pulley, and the counter-extension of the weight of the body; both these last diminishing in a great degree the pressure in the perineum. In this position there can be, I take it, no objection to the patient's being in a sitting posture. Any danger of pushing the fragments upon each other is obviated by the use of the swing.

Although fully alive to the danger of unequal pressure, I have found so much ease in keeping in place some oblique fractures of the tibia and fibula, that required great force to bring them into place, by the use of some old copper half-boot splints applied to the outside of the leg, that for the last two or three years I have made diligent inquiry for a method that would give me their advantages without their defects. Such a method I believe to be that which I will now attempt to describe, premising that I would only treat in this manner those fractures, whether simple or compound, that, when placed in this position, are found to be, and to remain, perfectly in place. In order that the best possible thing should be done, it will often be necessary to try different procedures for what may appear at first sight to be precisely similar cases. If the fracture is easily reduced by flexion upon the thigh, and if it remains in place when placed upon its outer side and extension is removed, a thin board about seven inches broad projecting forwards at one end to support the foot, and backwards to be bandaged to the thigh, thickly padded with bran, or cotton wool so as to fit the outer side of the leg and foot, may be placed under the limb. After carefully adjusting the pads so that the spine of the tibia is just as it should be placed, and the foot occupies its proper position, there may be placed upon the now upper side of the lower third of the thigh, the whole of the leg and the foot either a gutta percha, or, as I prefer, a sole-leather splint, cut so as to encircle one-third of the circumference of kneejoint, leg and foot as far as to the extremities of the toes. By moistening in hot water, either of these materials may be so moulded to the inequalities of the limb as to fit most perfectly. The width of the lower splint effectually prevents any undue constriction; and the perfect fit of the upper will enable the lower one to be dispensed with, if need be, for any cause. If the attitude becomes wearisome the limb can be placed upon its heel in a swing cradle. I think this modification of dressing gives all of the advantages of the starch bandages without any of its dangers, and all of the advantages of carved splints without any of their irritation.

The difficulty of transporting an elaborate fracture bed from place to place, is so great, and there is such a repugnance to their use among many, unless the bed is new, that I am driven to the use of a simple and yet perfect substitute. Who first proposed it I know not, but I think the credit is due to Prof. Gilbert of Philadelphia. Spread over the bed stout bed-ticking with a hole in it to allow of the necessary evacuations; attach the margins of this to a frame. The sheets can be placed upon this in the usual manner, except that two, each meeting each at the hole spoken of, had better be used instead of one under sheet. Any simple mechanism or mere manual power will suffice to raise the patient upon this frame from the bed to allow its being made up and for other purposes. The frame might easily be made so as to be removed when not in use, of course leaving the ticking under the patient.

PLURALITY BIRTHS.—During the year, 339 women bore twins, and two bore three children each. Of the 34,148 women who bore living children in 1858, therefore, 341, or one in every hundred, produced more than one child. During the seven years, 1852-1858, there were 229,856 living births recorded in the State; of these 4,262 were twins, and 87 triplets. Of the 227,695 child-bearings, 2,132 produced twins, and 29 three children at a parturition. Thus one in 107 produced twins, and one in 7,852 triplets; the proportion of those producing triplets to those producing twins was as one to 73.5.—*Mass. Registration Report*, 1858.

Reports of Hospitals.

LONG ISLAND COLLEGE HOSPITAL.

CASES OF FRACTURE, WITH REMARKS BY PROF. FRANK H. HAMILTON.

[Reported by JOHN G. JOHNSON, M.D., one of the Surgeons to the Hospital.]

Case 1.—*Extra-capsular Impacted Fracture of the Neck of the Femur—Death and Autopsy.*

MARY HODSON, æt. 53, fell, March 29, 1880, upon a curb-stone, striking upon her left trochanter major. She was immediately admitted to the hospital, and examined in the presence of the class. Limb shortened half an inch; toes not everted, but directed forwards; no crepitus; all motions of the hip-joint very painful.

Prof. HAMILTON remarked that the shortening of the limb was evidence that the patient had either a fracture of the neck of the femur or a dislocation; while the age of the patient, the manner in which the accident happened, and the absence of certain signs of dislocation, rendered it equally certain that it was a fracture. The question then remained, is it a fracture within or without the capsule? The fact that she had fallen upon the trochanter, that the limb was only shortened half an inch, that the toes were not everted, plainly pointed to an extra-capsular and impacted fracture. The limb was directed to be dressed with a long straight splint, without side splints, which in this case could be of no service, and with only moderate extension and counter-extension just sufficient to maintain it in perfect quietude. The case seemed to be progressing favorably until April 5th, when we became aware of the existence of pleuritic effusions, and on the night of the following day she died.

Autopsy.—The left femur was broken outside of the capsule and impacted; the head being depressed about half an inch, and the lower part of the neck being driven into the trochanter major. The trochanter was broken into five fragments. The specimen, with the opposite femur, is preserved in the museum of the Long Island College Hospital.

DISLOCATION OF HEAD OF HUMERUS FORWARDS—SUBCORACOID—FRACTURE OF THE SURGICAL NECK OF THE HUMERUS IN THE ATTEMPT AT REDUCTION.

Martha Morgan, æt. 70, admitted to the hospital April 27, 1880. Six weeks before she had fallen upon her right shoulder, but not suspecting the nature of the injury no surgeon had been called. The swelling having completely subsided, the diagnosis was easily made, all the usual signs of this accident being present. It was also ascertained, during the attempt at reduction, that two or three ribs were broken in the axillary region, their fracture having been occasioned by the head of the humerus as it was thrust against them.

In presence of Drs. Crandel, Johnson, Dodge, Duval, and others, hospital surgeons and physicians, and medical students, Dr. Hamilton proceeded to attempt the reduction, not, however, without having expressed his opinion that it might be found impossible by ordinary means.

First Attempt, without chloroform.—The arm was raised gently to a right angle with the body, while the forearm was flexed upon the arm, an assistant held firmly upon the acromion process, and Dr. H. pulled upon the humerus, rotating, at the same moment, the humerus from left to right.

Second Attempt, under the influence of chloroform.—The same manoeuvre was repeated, and while Dr. H. was rotating the humerus, it was felt to give way, and he at once expressed a suspicion that the surgical neck of the humerus had broken, a suspicion which was very soon confirmed by examination.

After this the patient, still remaining under the influence of chloroform, repeated attempts were made to reduce the dislocation, by pressing the head of the humerus towards the

socket with the hands, by placing the heel in the axilla, and by carrying the arm in various directions, but to no purpose. The broken humerus was then dressed, as for a fracture, and the patient laid in bed; violent inflammation of the lungs and pleura supervened, from which the poor woman died on the fifth day.

Dr. HAMILTON remarked that this case illustrated the danger of producing a fracture while attempting to reduce a dislocation, especially in old people; when the bone gave way, only moderate force was being employed. He also noticed that the fracture was produced while rotating the limb, as it usually is. The same is the fact generally in fractures of the neck of the femur when they are produced by the surgeon in his attempts at reduction. The death, due, no doubt, to the manipulation, resulted nevertheless from an amount of injury, which, to a person in middle life and in ordinary health, would have proved harmless. No autopsy was allowed.

DISLOCATION OF THE HEAD OF THE HUMERUS INTO THE AXILLA—REDUCTION AND REDISLOCATION.

Peter Higgins, cartman, æt. 38, April 1, 1880, dislocated his right humerus into the axilla while holding upon the bridle of a horse who was attempting to run. Higgins did not suspect the nature of the injury or make application to any surgeon until the ninth day, when he presented himself at the hospital. The usual signs of this accident were present. Dr. Hamilton called the attention of the class especially to the sign common to all dislocations of the humerus, first noticed by Dugas, a distinguished surgeon of Georgia, namely, that the hand of the dislocated limb could not be placed upon the opposite shoulder, while at the same moment the elbow was made to touch the front of the chest. In fractures about the shoulder-joint this can almost always be done, as also in examples of simple contusion, but never in a dislocation.

Dr. HAMILTON said that he would first attempt the reduction without employing an anæsthetic, and by the most simple method, and failing in this he would proceed to other methods. This was his almost uniform practice in such accidents.

First Trial—Simple Manipulation—Unsuccessful.—The patient was seated in a chair, when Dr. Hamilton, standing partly in front of him, but somewhat to the right, seized the elbow with his left hand, and the wrist with his right, bent the forearm to a right angle with the arm, and then, lifting the arm to a horizontal position, made slight rotation upon the humerus, employing the forearm as a lever. No extension or counter-extension were employed in this manipulation; but, as was anticipated, it failed to accomplish the reduction.

Second Trial—Manipulation aided by a Fulcrum—Successful.—The patient still seated, Dr. Hamilton placed the knee of his left leg in the axilla, and while the forearm was flexed as before he seized the elbow with his right hand, rotated the humerus, pressed the elbow towards side of the body, and made slight extension, when, in a moment, the head of the bone fell into its place.

Subsequently, while Dr. H. was lifting the elbow to indicate the freedom of motion which the limb had now acquired, and when the humerus was not quite at a right angle with the body, it suddenly slipped again into the axilla. The reduction was at once effected, and with the same ease, by the method which had succeeded before.

Dr. HAMILTON remarked that the points of interest in this case were, the length of time which had elapsed during which the accident was not recognised; the absence of the pain and swelling in the limb, which usually accompanies an unreduced dislocation of the humerus into the axilla; the facility with which it was reduced, although he was a very muscular man, by Sir Astley Cooper's method, which method was but little more than using the knee as a fulcrum, and the humerus as a lever; and the facility with which it was again luxated.

The arm was dressed by placing it in a sling, with the elbow close to the side of the body. No axillary pad was used, and, indeed, its use was condemned as being not only unnecessary, but dangerous, since it was likely to produce paralysis by its pressure upon the axillary nerves.

July 1 (three months after the accident).—His arm is still very much paralysed, although it has been submitted to passive motion, aided by stimulating liniments, since the second or third week. This paralysis is probably in some degree chargeable to the length of time it remained unreduced, as well as to the amount of injury immediately sustained by the dislocation. He claims damages against the railroad company by whose locomotive his horse was frightened; and we can see now the importance of distinguishing between the natural and usual results of such accidents, and those which may arise from neglect or maltreatment afterwards.

NURSERY AND CHILD'S HOSPITAL.

MENINGITIS.

The following cases present some features of interest. In the one, the symptoms of meningitis commenced at the early age of a little more than three months. The disease ended fatally, with the usual symptoms, after about one week. At the post-mortem examination the bronchial and thymus glands were found to be almost entirely tubercular; both lungs, the liver and spleen contained numerous miliary tubercles, and the same were found, in less abundance, in the kidneys and mesenteric glands. At the base of the brain, was the fibrinous layer usual in acute hydrocephalus, with three small points of a tubercular character, not larger than a pin's head. The meningeal inflammation was connected with the tubercular diathesis, and not due to the presence of tubercles. The other case was remarkable, on account of the long continuance of cerebral symptoms. The hydrocephalic cry, constipation, rigidity of the muscles, and throwing back of the head, were noticed, though not always well-marked, for more than three months before death. There were no convulsions, and his death was easy. The disease was chronic, rather than acute. At the autopsy, no tubercles were found in any part of the body, though the emaciation was great. The amount of serum in the cranial cavity was scarcely increased, but nearly half of the entire brain was completely covered by a thick and firm fibrinous effusion, lying equally on the superior, lateral, and inferior surfaces of the cerebrum. This effusion was interesting from its striking appearance, resembling a layer of fat, due, as the microscope showed, to the large number of exudation corpuscles which it contained.

Case 1. (Under the care of Dr. F. U. JOHNSTON.)—G. B., aged two and a half months at his death, came into the Nursery on the 17th of last February. He was, on his admission, somewhat emaciated, and his muscles soft and flabby. The day after he was received he began to vomit, and have frequent passages from the bowels, of a thin starchy character, and very offensive odor. Lime water and creasote were given for the vomiting, and castor oil mucilage to correct the bowels. On the next day he had only two evacuations from the bowels, but the frequency of the vomiting was little diminished. Constipation now succeeded, and head symptoms began to develop themselves. He would awake suddenly from a restless sleep with sharp screams, and continue to cry till the breast was given to him, when he would suck ravenously, and immediately vomit nearly all he had taken. On lifting him from his pillow, he invariably made an effort to vomit; the anterior fontanelle became prominent and tense; the eyes were turned upward, and the head kept continually rolling from side to side; the thumbs were bent across the palms, and tightly clenched by the fingers, while the toes were strongly flexed, and the feet inverted. These symptoms continued without variation till the 23d of February, when well-marked general convulsions set in. These recurred at

shorter and shorter intervals, but finally ceased at about 12 P.M. of the same day. He was left completely prostrated, and gradually sank and died at 3½ A.M. on the 24th.

Autopsy.—On removing the calvarium 3 iis of serum escaped from the ventricles, and the base of the brain. The convex surface of the brain presented the natural appearance, excepting moderate vascularity. Around the pons varolii, and along the base of the brain to the fissures of Sylvius, the membranes were thickened, and opaque from fibrinous deposition; these fissures were closed by adhesions; under the right middle lobe, near the mesian line, were two or three white points of a tubercular appearance, on a vascular surface, less in size than a three cent piece; the interior of the brain was not examined at this time, and no record was preserved of its appearance; bronchial and thymus glands almost entirely tubercular; both lungs studded with tubercles, and both readily inflated; no adhesions of the pleural surfaces, but points of deposit, apparently tubercular, under the costal as well as pulmonary pleura. The liver was yellower than natural, weighing seven ounces. This organ and the spleen contained numerous miliary tubercles, the largest not larger than a shot; they were more numerous in the latter than the former organ. The kidneys contained a few similar points; mesenteric glands of the usual size and appearance, except that some of them also were tubercular; intestines to all appearance healthy.

Microscopic Appearances.—The white points observed under the right middle lobe, were found to consist of amorphous matter, with a few tubercular cells; only one, two, or three of these cells were found at a time in the field; the liver contained few hepatic cells, but an unusual amount of free oil globules. In the lungs many exudation corpuscles were found, besides the tubercular and the normal cells.

Case 2. (Under the care of Dr. Wm. W. JONES.)—A. B. was admitted into the Nursery September 2d, 1859, at the age of two weeks. He was healthy, and continued to thrive until about the middle of last January, when he began to have cerebral symptoms. If quiet, nothing unusual was observed in his appearance, but when raised or disturbed, his eyes became fixed, limbs flexed and head thrown back. He nursed often, with little or no vomiting, but his bowels were confined, and occasionally he uttered the characteristic shrill cry of hydrocephalus. These symptoms soon became less marked, but did not entirely disappear; he grew emaciated by degrees, and at one time had diarrhoea. About the middle of April, a yellow hue was noticed on his skin and conjunctiva, and this continued till his death, which occurred April 29th. He had no convulsions through his sickness, and he appeared to die of asthenia.

Autopsy.—Thirty-two hours after death, emaciation extreme; thoracic viscera healthy; liver of a yellowish hue, and weighing 3 ix.; spleen, kidneys, and intestines healthy. On removing the calvarium 3 ii. to 3 iii. of serum escaped from the ventricles and the base of the brain. That portion of the brain in front of the pons varolii, constituting nearly half of the entire organ, was covered with a smooth and continuous deposit, of a lardaceous appearance. This was found equally on the superior, lateral, and inferior surfaces of the cerebrum, and it entirely concealed the brain underneath. It varied in thickness from about one to three lines, and was thought at first sight by some to be purulent, by others fatty. It dipped into and closed the fissures of Sylvius, and appeared slightly on the anterior superior surface of the cerebellum. The remainder of the cerebellum, the posterior lobes of the cerebrum, the pons varolii, and the spinal cord, were free from any deposit, and appeared healthy; the interior of the brain was examined elsewhere at a subsequent period, but it is said not to have been much affected by the disease. Under the microscope the deposit was found to consist mainly of exudation corpuscles, thus accounting for the fatty appearance. The liver contained an unusual amount of oil globules, both free and in the hepatic cells.

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American Medical Times.

SATURDAY, JULY 28, 1860.

WHAT SHALL BE OUR TITLE?

A GRAVE question must ere long present itself for the consideration of the medical profession of this country, on the solution of which will depend its character at home and its position abroad. It is this:—By what title shall a practitioner of legitimate medicine be recognised? What shall constitute a Doctor in Medicine? Hitherto it has been deemed sufficient that an applicant for admission to a regularly organized society should present credentials showing him to be a graduate of a chartered medical college, or a licentiate of a County or State medical society. But the ease with which charters are now obtained from State Legislatures for every nondescript association of men, whether for proper or improper purposes, has effectually broken down these safeguards to respectability, and thrown widely open the field of medicine to every one who desires to enter and profit thereby. With the single and most honorable exception of the State of North Carolina, we are not aware that any State has laws protecting the domain of scientific medicine from the intrusion of lawless adventurers. It will ever redound to the honor of the old North State, that her legislators have shown such wisdom and intelligence, in ordaining that no one can assume the office of physician within her borders, who has not passed an examination before a State Board of Medical Examiners. In our own State, not only is the utmost license given to every species of charlatanry, but the chartered institutions of irregulars are placed on the same level with others, and the one may, by a civil process, even be compelled to receive into membership the graduates of the other. The recent attempts to establish a Homœopathic Professorship in the Michigan University and the efforts of this class of practitioners to obtain positions in hospitals, are indications of approaching evils that we would do well to heed, and, by timely action, avert.

Our attention has been especially called to this subject by the recent application of several graduates of Homœopathic Colleges in the United States, to the British Medical Council, to be registered under the clause admitting graduates of Foreign Universities. The council found itself in a quandary, but finally referred the matter to the Attorney-

General to advise the Council as to its duties. It is not difficult to predict the result of this inquiry; the institutions referred to will be found legally authorized to confer the degree of M.D., and the applicants will, doubtless, be admitted to registration. It may be a serious defect in the Registration Act, which is designed to distinguish qualified from unqualified practitioners, that the Medical Council has not power to decide as to the character as well as to the legal status of the Foreign University from which the applicant claims to have graduated. But this does not concern us so much as the question which has, in fact, been put to us by this action of the Medical Council, viz. What constitutes a Doctor of Medicine in the United States? We should answer truly if we replied: The assumption of the title M.D. Neither the law nor the public require more, and both unite to protect the pretender in acting out his assumed character. But to be more exact in the definition, we should answer: Any institution or society which has the power granted it, in its charter, of conferring the degree of M.D. The laws in this country do not differ in this respect, we believe, from those of other countries, except in these important particulars:—Charters are granted by our State Legislatures to any and every body of men, for any and every conceivable purpose, without restriction or reserve, while abroad great discretion is exercised both as to the object of the corporate body, its necessity, and its character. Its powers are carefully limited, and it is jealously watched that it fulfil its duties.

With us the case is widely different. At nearly every session of our State Legislatures a brood of medical institutions are chartered embracing every conceivable shade of quackery, all equally with the schools of legitimate medicine entitled to confer the degree of M.D. and to represent themselves abroad as Universities.

We shall leave the Medical Council to settle this question as they think proper after hearing the opinion of their legal adviser. We may, however, assure our brethren abroad that, in the United States, the title of M.D., in a legal sense, is a misnomer, and that the term university is applied equally to our most honorable and useful institutions of learning, and to corporations utterly unworthy of the association of the term—science.

To the medical profession of this country we put the question: What is to constitute a Doctor in Medicine among us, and by what title or insignia, shall an American physician be distinguished abroad? Had we but one legislative body before which we could lay our grievances, we might seek and obtain enactments defining who are, and who are not, qualified practitioners of medicine. But as we must appeal to our State Legislatures, so fickle in their action, and so much under the influence of the prejudices of the moment, it is idle to waste time in seeking legal protection. The barriers erected one year with labor and care, are the next levelled by the first breath of opposition.

But happily there is a power among us whose jurisdiction extends to the remotest limits of our country, and whose decision will be respected. That power is the American Medical Association, our National Medical Congress. Standing as the recognised representative body of legitimate medicine in this country, high above all law, and enforcing its mandates by an inherent moral force, it can legislate for its own protection, and no evil influence can reverse its measures, or thwart its designs. This Medical

Congress has the power to determine what title shall hereafter designate the practitioner of legitimate medicine, and to this body the profession must make their appeal.

A VOICE FROM THE RURAL DISTRICTS.

IN the rush and turmoil of city life we sometimes feel that it would be well if the calm voice of the good and true men in the rural districts were occasionally heard on various questions relating to the physical and moral interests of the metropolis.

The following Resolutions, which we copy from the *Broome Republican* of June 29th, were adopted unanimously by the "SOUTHERN CENTRAL NEW YORK MEDICAL ASSOCIATION," at its annual meeting held June, 1860. They enable us

"To see ourselves as others see us."

Resolved, 1st, That in the opinion of the Members of the "Southern Central New York Medical Association," composed of the practitioners of Medicine and Surgery in the counties of Broome, Tioga, Chemung, Schuyler, Tompkins, Cortlandt, and Chenango, N. Y., and Bradford Co., Pa., that for the well-being of the residents of the great metropolis of our State, and the commercial emporium of our nation, in its sanitary regulations, and in all that pertains to the prevention, the removal of the causes, and the cure of diseases incidental to its dense population, it should be entirely under the control and supervision of the medical profession of the city; that the head of the City Inspector's Department, with all its details, should be intrusted only to individuals well versed in the science of medicine, who, in our opinion, are far better qualified to stay the progress of disease and pestilence than those who have no knowledge of the healing art.

Resolved, 2nd, That it is due to the citizens of this State, and of every State in the Union, as well as of the city itself, that in our daily visits and constant intercourse with the city, we should be protected from the sources of pestilence there generated and uncontrolled by the guardians of the health of the city. Feeling a just pride in all that pertains to the growth, the business affairs, and prosperity of our metropolis, and as desirous as the residents of the city, to see it in all respects well cared for, we are ashamed that the whole of the sanitary police of the city, the legal guardians of the health of its population, should be entirely intrusted to a class of men entirely ignorant of the first laws of sanitary protection.

Resolved, 3d, That we feel it incumbent upon the city authorities and the legislature of the State, at once to institute such changes in this respect as shall remedy existing evils; that a city possessing all the natural and local advantages of New York may not be compelled to stand highest on the scale of mortality of any city of the civilized world.

Resolved, 4th, That we deeply sympathize with the medical profession of that city, that with all their learning, their benevolent labors for the residents of their homes, and all their laudable endeavors to promote a reform in the sanitary condition of their city, they are subject to the mortifying position of seeing the legal guardianship of the health of their city wrested from them, and placed in the hands of a class of men who have no proper knowledge of their duties, and whose only qualification for the posts they occupy, consists in being reckless partisan politicians.

The foregoing resolutions are significant of the increasing and rational interest which is everywhere being awakened on the subject of sanitary improvement. We regret that the deplorable misgovernment, abuses, and defects of the Health Department in this city justify such resolutions; but the cri-

minal neglect of human life and health cannot be concealed. Every town and hamlet in the State may justly express an interest in this subject, and we should not be surprised to see the example of the Southern Central New York Medical Association followed by the several county medical societies; for there probably is not a county in this State, nor a single State east of the Mississippi, that could not furnish the records of several cases of smallpox, known to have been carried thither, and propagated by their own citizens, returning from this emporium of trade. A few years ago, while passing through two of the counties comprised in the Association, whose resolutions we have here recorded, we witnessed such cases in two of the largest villages in those counties.

As stated by the Assembly Committee on the Health Bill in the New York Legislature last winter, it is manifestly true that—"The enforcement of preventive sanitary measures therein" (the city) "by the Legislature, is therefore but a measure of protection to their constituents throughout the entire State." In view of such considerations, as well as for humanity's sake, we regard such resolutions from the rural districts as eminently timely and proper. It also appears from the local newspapers that "Dr. Geo. W. Bradford, of Homer, Cortland Co., presented to the Association at Binghamton, an elaborate paper on the necessity of sanitary reform in all the cities of the State, and more especially in the commercial metropolis."

We desire to see that paper. The theme is characteristic of its distinguished and enlightened author, who is widely known as an earnest friend of humanity, and to whom, it will be recollected, the medical profession and the friends of humanity have previously been laid under lasting obligations for many wise and philanthropic acts, projected and made effective through his instrumentality, during the five years he sat in the Senate of our State Legislature. The Anatomical Bill, and the official Report on the Charitable Institutions and Alms-houses of the State, are most enduring monuments to his well-directed and zealous labors for human welfare. With such co-workers as Hon. Dr. Bradford and his hundred associates of the Southern tier, the friends of sanitary improvement may take courage. These brethren from their elevated eyrie beyond the din of the metropolis and the sham of its politics, take a very natural and practical view of the first steps required in the work of sanitary reform in this city. We like the directness and point of their resolutions. No effectual improvements will ever be inaugurated by men who are ignorant of sanitary principles, and intent upon mercenary gains; yet it must be borne in mind that any successful and thorough measure of sanitary reform in New York will require something more than a substitution of medical men in the *personnel* of the Health Department of the municipal government.

THE WEEK.

At the last meeting of the Academy of Medicine, the following resolution was passed:

Resolved, That the New York Academy of Medicine, desiring to express its approbation of all proper measures designed to protect the community against the evils liable to result from the unrestricted sale and use of poisons, hereby respectfully requests the New York College of

Pharmacy to cause to be forwarded to every apothecary in this city a copy of the Act relating to the sale of poisons—passed by the last Legislature, accompanied with the request of this Academy that strict adherence be given to the provisions of that law.

This is, we believe, the first effort that has been made to secure the enforcement of the law recently enacted in this State to control the sale of poisons. But will the request of the Academy, made known to our apothecaries through the College of Pharmacy, induce them to adhere strictly to the provisions of this law? We venture to predict that, like all advice given gratuitously, it will not be heeded. If the Academy intends to secure the enforcement of this law, the most direct and effectual method of accomplishing its object is by a systematic prosecution of offenders.

Reviews.

DE LA FRÉQUENCE DES ALTERATIONS DES ANNEXES DE L'UTÉRUS DANS LES AFFECTIONS DITES UTÉRINES. Par F. SIREDET, M.D., etc. Paris: A Delahaye. 1860. 4to., p. 141.

In the preliminary remarks the author points to the fact, that, notwithstanding the wonderful progress that has been accomplished in our days regarding female diseases, the affections of those organs, generally called annexa uteri, were unduly neglected, while the womb itself received too large a share of our attention. It is true that the researches of Dr. Nonat have advanced considerably the study of peri-uterine inflammations, but the nature of this disease has been questioned by other observers, especially by Bernutz and Goupil, who declare that most of the cases taken for peri-uterine cellulitis were essentially nothing but localized peritonitides. The thesis of Dr. S. is written for the purpose of establishing the fact, that the womb itself is rarely the seat of morbid alterations, and that where this organ has been primitively diseased, it soon communicates its affection to the tubes, ovaries, ligaments, and pelvic peritoneum. The pathological condition of these accessory organs Dr. S. proposes to call perimetritis.

The principal causes which lead to a development of perimetritis, are a catarrh of the vagina or uterus, propagated by way of the Fallopian tubes to the peritoneum in the pelvis, and the organs contained therein; frequent sexual intercourse indulged in during the catamenial period; early walking about after delivery; the oft-repeated congestion of the ovary during menstruation and childbed; incautious examinations with the uterine sound, and the indiscriminate use of pessaries and caustics.

Pathological Anatomy.—The uterus itself is rarely quite healthy in a patient who labours under perimetritis; it is often congested, its mucous membrane exhibiting traces of catarrh and ulcerations. Ovaries and tubes are in many instances diseased. The oophoritis may exist in the acute or chronic form, the former occupying generally one, the latter both sides. The pelvic peritoneum may be inflamed in the acute or chronic stage. In the latter instance the several organs situated inside the pelvis are united one with another by false adhesions, and it is very common to meet with new formations of this kind in the spatium Douglasii, which leads in this place to the development of cysts containing serum, pus, or tubercular matter; and deposits of this nature have been very generally mistaken for products of peri-uterine cellulitis.

Symptoms.—The disease may be encountered in the acute or in the chronic stage. In the former instance we have a slight chill at the beginning, and fever, pain in the abdomen,

and more particularly in the left iliac region, spreading downwards to the thigh. During the chronic state the nature of the pain is more that of a sensation of heaviness in the abdomen, and of aching in the lumbar region. Dysuria is seldom missing. The temperature as well as the secretion of the vagina is increased. The uterus is felt lower down, or somewhat open; the position of the womb varying according to circumstances. The tumors perceived on one or the other side of the uterus are mostly hard to the touch, seldom fluctuating, although they may contain pus. The examination per rectum is of great importance, inasmuch as it conveys a more correct idea as to the shape and size of the peri-uterine tumors. When the disease has lasted for a length of time it is accompanied by disturbed digestion, anemia, irregular, scanty, seldom profuse, painful menstruation and leucorrhoea. In some instances there is a recurrent febrile reaction, mostly at night, and a discharge of pus through vagina or rectum. At times, however, the course of the disease is less favorable, the abscess opening into the peritoneum, or by its constant regeneration the strength of the patient is exhausted, or suddenly carried off by phlebitis. In the chapter on diagnosis the different diseases are briefly considered which may be mistaken for perimetritis—these are congestion of the womb, metritis, peritonitis, salpingitis, ovaritis, cystitis, retention of urine and feces, uterine displacements, pregnancy, tumors, hydro-metra, cellulitis pathological conditions of the pelvic bones, secondary abscesses, etc., etc.

The treatment has to be adapted to circumstances. In the acute stage of the disease we have to use general or local depletions in connexion with ice, opium, calomel, and unguentum hydrargyri. The chronic form being very generally combined with anemia, our efforts have to be directed principally against this latter complication. Generous food, iron combined or not with iodine, flying blisters, and the uterine douche are the safest remedies. Cauterization of the os is of very little value, except in those cases where there are extensive ulcerations and an abundant secretion. In regard to the peri-uterine tumors it is, generally speaking, better to let them alone; their spontaneous breaking being followed by better results. If, however, they should excite violent pains or symptoms of beginning pyæmia, the scalpel must be called to aid.

It is our impression that the thesis has been written with the preconceived intention to wage war against the advocates of peri-uterine cellulitis, and Nonat in particular. Such a procedure must always lead to confusion, inasmuch as facts are not simply stated with their natural conclusions, but the observations contorted and modelled so as to suit the ideas of the author. This is evidently the case with our author. Confusion is stamped on every page of the work. The author has evidently read, though not digested, Virchow's article on chronic peritonitis pelvina, which affection, together with ovaritis, salpingitis, pelvic abscess, cellulitis, he squeezes into one disease which he chooses to call perimetritis. His attempt to do away with cellulitis is a perfect failure. If he did not succeed in meeting pelvic cellulitis in the dead subject, this is very naturally explained by the fact that, by far the largest number of cases coming under this head get well, so that the occasion to meet with the affection post-mortem is very seldom offered. On the other hand, our experience has led us to believe that pelvic peritonitis is in very many instances the natural consequence of pelvic cellulitis, and while the latter affection disappears very generally without leaving the slightest trace, the vestiges of a local peritonitis remain for years in the body, so that it is, to say the least, very difficult in the dead to decide on the true nature of the original affection. E. N.

IMMIGRATION.—The number of immigrants arriving at the port of Boston, in 1857, was not one-half as great as during any of the five years immediately preceding 1855, and not one-third as great as in 1850.

Progress of Medical Science.

OBSTETRICS AND DISEASES OF WOMEN.

By E. NOEGGERATH, M.D.

Labor complicated with Osteomalacia Pelvis. Dr. L. SCHMITZ (*Scanzoni's Beiträge*).—The readers of the *New York Journal* have been presented from time to time with reports on the interesting subject of wax-pelvis (haliteresis). Dr. Schmitz's contribution adds another case to those already known. Catharina Kilberg was born of healthy parents, both of whom died of old age. The patient was then left to support herself, in the service of strangers, who sent her out to do work in wet and cold weather, so that she soon began to suffer all sorts of pains in her limbs, and more particularly in the back bone. From her sixteenth year of age, when she had her courses for the first time, up to the twenty-eighth year, when she was married, she was subject to the rheumatic difficulty referred to. She soon became pregnant, and was relieved easily, at the full term, of a healthy child. A second child was born two years later, with no more trouble than on the first occasion. But on the ninth day after the birth of this child, the patient had an attack of convulsions, which seized more particularly on her hands and feet, both of which became after a while extremely painful. In a few days, however, nothing but a sensation of numbness was left, and the patient was about leaving her sick bed, when she remarked, to her great dismay, that she was unable to walk straight, as usual, but that she was obliged to use a walking-stick for moving about, and although no pain whatever was experienced, the sufferer began to fail in strength, and to lose her "embonpoint" considerably. However, after the lapse of a year, she gave birth to a third child. The labor this time was unusually short, but the afterbirth was adherent, and had to be removed artificially. During childbed the former state of general debility increased a good deal, and she began to suffer from distressing pains in both knees, and about the pelvis. Although she continued losing strength and muscle, a fourth pregnancy occurred in the thirty-fifth year of her age. She now was hardly able to leave her bed, and whenever she tried to step on her feet she was taken with the most intense pain in her back and both sides of the pelvis. She was delivered at her full term of a full-grown child, without difficulty, whom she nursed during eleven months. After this childbed she began to walk around somewhat easier, but she never was free from those pains. In about a year she was again in the family way, and felt pretty comfortable for the first four months. After that time, however, the old complaints returned worse than ever, and she soon was unable to leave her bed, unable as she was to walk, and tormented by aches in the pelvis and lower extremities. When she was taken with the first labor-pains, the midwife who attended her declared that she could not be delivered without the assistance of a physician. Consequently two physicians of well-established reputation, Drs. Schiltz and Angenstein, examined the patient, and concluded that nothing short of Cæsarean section was left to save the mother and child. Under these circumstances she was conveyed to the Cologne Lying-in Asylum, then under the care of the popular and well-known accoucheur Dr. Merrem. Arrived here, it was found that she could not be transported up stairs to the bed assigned her, the slightest touch of the bones of the chest, as well as those of the pelvis and lower extremities, producing intense pain. When at last brought to bed, she placed herself instantaneously on the left side—the only position that gave her comfort, if comfort it could be called. The aspect of the patient is that of a mere skeleton, 4 feet 6 inches high, and bearing the expression of long and agonizing suffering, while the upper extremities are moved about easily. She is unable to change the position of her legs in the least

degree without producing pain. The diameters of the pelvis, on examination were as follows:—Baudelocque's external conjugate 7" 2"; antero-posterior diameter of the outlet 3"; lateral diameter of the same, 1' 9"; widest distance of the pubic arch, 1' 5"; distance of the arch between both ischio-pubic synostoses, 7". An attempt at internal examination was frustrated by the fact that the index finger could not be passed higher up than to the second joint. It could, however, be ascertained that the bones forming the pubic arch were pliant to some extent, by inserting two fingers between the pubic bones and pulling them gently asunder. The os was very low, and opened to about $\frac{1}{4}$ " none of the fetal parts could be reached. A consultation of the medical staff agreed with the verdict of the attending physician, that Cæsarean section was the only means of delivery. This conclusion was arrived at, at 12 o'clock midnight, and the performance of the operation deferred to the following day, to give the patient a chance of being delivered in a less hazardous manner, by allowing the process of labor to exert its softening influence upon the already mollified bones. The pains were, and remained, very insignificant up to 10 A.M. of the following day, when the uterine contractions began to be very energetic. Now the membranes could be easily touched, because it was possible to pass the forefinger to a considerable distance, the pubic bones yielding to a slight pressure with the finger. In two hours it was possible to recognise a vertex presentation; at 9 o'clock, P.M., the membranes burst, and the head descended towards the outlet. At 11 o'clock P.M. the pains began to slacken, but were most effectually revived by a few doses of ergot, so that the scalp began to show at the os externum, and while it advanced it could be easily remarked that the pelvic bones were driven asunder, so much so that the distance between both tubera ischia was now 3", while the same measured 1' 5" at the beginning of labor. After the head was born, the body of the child was extracted by a hook inserted under the axilla. After the birth of the child a hemorrhage ensued, therefore the afterbirth was immediately removed; the same appeared to be adherent, but was taken away easily by passing the hand into the womb, which could now be readily accomplished, although it was impossible to introduce the forefinger on the day before. The child was stillborn; weight 6½ pounds; length 19"; long diameter of the head, 4" 6"; lateral diameter, 3" 2"; diagonal diameter 5". The patient recovered soon, and left the hospital twelve days after her confinement.

The Importance of the Position on Knees and Elbows during Labor. By R. DORNEIFF. (*Thesis. Gießen*, 1860.)

—The indications for the position *à la vache*, the author sums up as follows:—1. For the purpose of turning, especially in those cases where parts of the foetus are tightly wedged in the outlet of the pelvis, thus rendering the introduction of the hand difficult; or when the pelvis is very much inclined forwards; when the foetus is tightly surrounded by the uterine walls; in cases of pendulous abdomen; in those cases where the feet of the foetus in a cross position are very much directed forwards or sideways; and finally, in stricture of the uterus. 2. For obstetric examination, when the same is intended to explore the pubic region, the linea innominata, or the os coccygis; especially in retroversio uteri and in untoward inclination of the pelvis. 3. In forceps operations, if the same is to be performed in pendulous abdomen, or in a position of the head above the symphysis pubis. 4. For reposition of prolapsed funis. 5. In cases of partus præcox. These, and a large number of other indications are recommended by Dr. Dorneiff. We have no doubt that under certain circumstances, especially those mentioned under Nos. 1 and 4, the advised position will be of use; but we must confess that under most of the circumstances mentioned, the usual position will suffice. If we draw the attention of the profession to this pamphlet, it is principally for the historical and literary department, which is very elaborate.

On Cæsarean Section. By E. MARTIN. (*Mon.-Schr. f.*

Geburtsk. xv. p. 8. Jan. 1860.)—The author remarks that the statistics of this operation would appear much more favorable if the fatal cases were not exclusively attributed to the operation itself, inasmuch as many failures are not the result of the surgical interference, but rather owing to after circumstances, independent of the performance of the action itself. The dangers resulting from Cæsarean operation may be divided into necessary and accidental. Among the former are counted, 1. The laying open of the peritoneal cavity. Although this procedure is not absolutely fatal, it involves certain dangers, such as prolapse of intestines during the operation, incarcerations of the same between the edges of the wound, and peritonitis. 2. Hemorrhage. 3. Formation of abscess. 4. Abdominal rupture. The accidental dangers are: 1. The lesion of the inferior uterine segment. 2. A pre-existing cachexia osteomalacia. 3. Several diseases of the sexual organs may influence the result of the operation. The best time for performing the operation is when the pains have been fairly developed, so as to insure a sufficient contraction of the uterus afterwards. With regard to the place where the cut ought to be performed, it is best not to follow one rule in all instances. This depends a great deal upon the situation of the womb, in order to obtain a contiguity between the abdominal and the uterine wound. The incision must be at least 5" long, so as to render the extraction of the fetus easy.

With regard to the closing up of the wound, the value of the proposition to connect the wound in the uterus with that in the abdominal wall is not yet sufficiently established. This point, however, is worthy of further inquiry. It is irrational to administer opium in every case, because this drug very often checks uterine contractions. The external application of ice is not always desirable. Its internal application is, however, very useful to check vomiting. If it should occur that the operation had to be repeated in a second pregnancy, the cut ought to run close by the first cicatrix, because an adhesion between the womb and the abdominal wall has been very often observed in successful cases.

Continued Ovulation during Pregnancy. F. W. SCANZONI. (*Beitr. z. Geburtsk. u. Gynaekol.* iv. p. 331, 1860.)—Professor Scanzoni defends his theory of continued ovulation during the time of gestation against the remonstrances of Dr. Kussmaul in the following manner: The rupture of the Graafian follicle, and the metamorphosis of the follicle into a corpus luteum, is the consequence of the menstrual congestion of the ovary. It is evident from the observations of Bischoff, Kulemann, Eichstedt, and others, that the process of menstruation is not always and not necessarily followed by a rupture of the Graafian follicle, even when it contains a mature ovum. If this be conceded, the question arises, whether there are not circumstances developed during, and some time after, gestation which are apt to hinder a rupture of the follicle, so that though a certain number of ovula be matured, their discharge from the follicle is prevented. The author answers this question in the affirmative. The ovum, arrived at and growing in the cavity of the womb, causes here, as it did formerly for the ovary, a lasting congestion and hyperæmia. The circulation, thus altered, is very apt to produce irritation, congestion, and hyperæmia of the ovary, but likely not strong enough to lead to a rupture of the follicle, partly because the uterus itself absorbs to a great extent for itself the vascular irritation, partly because the highly-developed vascular system of the uterus very soon paralyses to a certain extent the congestion of the Graafian follicle. Moreover, the softening of the ovarian stroma proves, perhaps, an impediment to the exudation into the Graafian follicle. The continued congestion of the ovary during gestation is certainly apt to increase the thickness of the follicular wall, by which circumstance its rupture is rendered difficult.

The periodical appearance of menstrual molimina can be demonstrated in many pregnant women; nor is a regular flooding of very rare occurrence during the time of gestation. Taking all these facts together, it seems evident,

although not demonstrable *ad oculos*, that ovula are matured during pregnancy without a consecutive rupture of the Graafian follicles.

Reports of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

Dr. GEO. WILKES, President, in the Chair.

JAN. 7TH, 1860.

DISCUSSION ON DIPHTHERIA.

Dr. C. M. ALLIN, of Flushing, related the histories of some cases of diphtheria which had lately come under his notice. About four weeks before he saw the first case:—A child about six years of age was seized with an attack of well-marked suppurative tonsillitis, which seemed to run its ordinary course for about a week or ten days, during which time an abscess formed and discharged; the swelling of the parts then began to subside. Two or three days subsequent to this, the child was suddenly seized with croupy symptoms. On examining the throat it was found that the swelling of the tonsils had returned, and at the location of the opening of the abscess there was discovered a large patch of false membrane, which covered the uvula, and extended down into the pharynx as far as could be seen. The child was very much prostrated, nearly pulseless, and was evidently rapidly sinking. The usual application of nitrate of silver to the parts, and the administration of stimulants was resorted to, but in vain, for the child died exhausted within twelve hours from the appearance of the first bad symptom.

Three days after this, a younger child, in the same family, was attacked with sore throat, which presented the ordinary appearances of ulceration. In this case, however, none of the symptoms of prostration were present, neither did any diphtheritic membrane show itself, and the child recovered. Nothing more was seen of the disease for the next fortnight, when Dr. Bloodgood, the partner of Dr. Allin, was called to another case. He found the child very much in the condition of the first case, and learned that she had first complained of sore throat to her mother three or four days before. Various domestic remedies were resorted to, but the patient growing rapidly worse, Dr. B. was called in. On examination, the roof of the mouth, the throat, uvula, and all below the pharynx, as far as could be seen, was covered with a thick darkish yellow membrane. The countenance was very pale, and wore a very haggard expression; the pulse was very rapid and feeble; and there existed a marked croupy cough. Nothing, however, could save the child—it died the same evening. Early the morning following, a child in the same family complained of sore throat, and Dr. B. was immediately sent for. The tonsils and surrounding parts were congested, but nothing more was visible. A gargle of chlorate of potash was prescribed, and directions were left to feed up the patient well. On seeing the case again in the evening he found an ulcerated spot about the size of a split pea on the left tonsil, to which he applied nitrate of silver. Chlorate of potash was then ordered internally, in addition to its use as a gargle. The next morning Dr. B. found that the ulcer referred to was larger than before, and there was also another of the same character on the tonsil of the opposite side. He applied the nitrate of silver again, and at the suggestion of Dr. Allin, hydrochloric acid was added to the mixture of chlorate of potash, in the proportion of a drachm of the former to two of the latter, in eight ounces of water: of this a teaspoonful was prescribed every two hours. I saw the case with him, continued Dr. A., a day

or two after, and found that membrane had formed upon the surfaces of the ulcers referred to. The whole roof of the mouth was congested, but the membrane was confined to the uvula and parts immediately surrounding. The strength of the patient did not seem to be much impaired, the pulse being only 110, and we had strong hopes that the progress of the disease might be arrested. The next day, however, the child fell off in strength, and we discontinued the potash mixture, ordering instead, the tincture of the sesquichloride of iron, to be used both as an internal remedy and a local application. At the time referred to, a portion of the membrane became detached, and, on being removed by the forceps, was found to be very tough in consistency, very like the slough of a nitric acid issue in general appearance. Yesterday morning (Friday) I called again to find the patient suffering from a croupy cough, while the surface of the throat, covered by the membrane, had increased very much in extent. The child became more and more prostrated, and died at six o'clock the same evening—ten hours after the first symptoms of laryngeal trouble showed themselves. In neither of the two cases reported were post-mortem examinations made.

Dr. ALLIN stated that Dr. Vedder (of Flushing) had also met with this disease. One case occurred in a child 18 months old, who sank rapidly and died in consequence of the appearance of croupy symptoms following an ordinary sore throat. The treatment consisted in the internal administration of the sesquichloride of iron and the local application of hydrochloric acid. A post-mortem examination was made. The tongue, pharynx, and lining membrane of the oesophagus, down as far as the cardiac orifice of the stomach, was found covered with the characteristic membrane. It also formed a lining for the larynx and trachea, extending as far into the lungs as the minuter divisions of the bronchial tubes. The lungs, aside from this, were only moderately congested. He stated that Dr. Vedder was treating, at that time, for diphtheria, a young girl 16 years of age, who was lying at the point of death. A blister was applied in one of Dr. Allin's cases, but the abraded surface was not covered with a diphtheritic membrane. In all the cases that recovered the convalescence was very much protracted.

Dr. A. C. Post referred to a case of this disease in a young woman, 21 years of age, which proved fatal in the course of the night in which she was attacked. Her child died a short time previous of the same disease. In both, the membrane made its first appearance upon the tonsils.

Dr. A. CLARK had seen, since a year ago last autumn, somewhere between sixteen and twenty cases of diphtheria. The oldest case that he had seen prove fatal, was that of a lady, 22 years of age. The oldest person that he had seen affected with the disease was not over 36 years of age. But a small number of post-mortem examinations were made, but they were however sufficient to show a very great variety in the extent of the newly formed membrane. In some instances it extended throughout the pharynx, lining the larynx and trachea, and going down as far as the bronchial tubes could be conveniently opened, besides extending into the posterior nares. In one case this membrane could be seen from the front plugging up the nostrils. In other cases the larynx was not at all affected, the diseased action being confined to the pharynx and oesophagus. On the other hand, he had found the deposit confined to the larynx only. In some of the cases where no post-mortem examinations had been made, immense tubes or bands of thick leathery matter had been expectorated, but without being attended with any relief in the laryngeal symptoms, except in two instances, where recovery took place. In all the cases, so far as he had the means of knowing, the membrane was visible upon some portion of the fauces, most commonly upon one of the tonsils, before any symptoms of dyspnoea showed themselves, and before there were evidences of the formation of the deposit in any other part. In nearly one half the cases in which fatal results had occurred, such a state

of things took place without dyspnoea, but with a set of symptoms such as he could hardly compare with those of any other disease. There was muscular force enough, yet there was a very marked feebleness of the pulse, which was attended with blueness of the nails and lips. He thought that it was a condition very apt to deceive a physician who saw such a case for the first time, and lead him to suppose that recovery might take place. In relation to the mode of invasion of this disease, Dr. C. stated that it had been exceedingly variable. I should think, continued he, that in the cases that I have seen, the severity of the symptoms of invasion have had some relation to the age of the patient, being more severe in those that are older. I do not, however, wish to make this as a general statement, it only is the result of a limited observation. In some children the ordinary symptoms of sore throat first present themselves, the membrane forms slowly, but the issue in such cases is hardly less fatal than that of others. In other instances the invasion is very brisk, the patient has two or three chills in the course of the day which are followed by a fever and rapid pulse. In these the progress has been pretty rapid, as near as general recollection will enable me to state, from four to seven days, while in the more insidious forms referred to the duration is a fortnight including the early illness. In those cases that recovered the convalescence was very much protracted. In answer to a question from Dr. Post, he stated that he recollected one case that lasted but three and a half days.

Dr. MCCREADY next cited the following case:—A patient of his, a child, was first seized with the ordinary symptoms of sore throat. In the course of a day or two membrane showed itself upon the tonsils, but soon disappeared entirely, and everything pointed towards a recovery. After the lapse of about a week, however, membrane appeared in the nostrils, when the child became suddenly collapsed and died within twenty-four hours after. In that case it seemed that the disease disappeared from the tonsils and afterwards selected the nostrils as its seat.

Dr. CLARK stated that in one case he saw with Dr. Crane, death took place in a somewhat similar way. All the membranes had been discharged and the boy was regarded as fairly convalescent. I visited the case one morning about ten days after the severe symptoms and thought him doing well. He was able to sit up a considerable portion of the day; his strength was increasing, and his friends were encouraged. About two o'clock of the same day, Dr. Crane was sent for, and found the child pale and sinking; the pulse at times would be scarcely perceptible, then it would become more full, but the exhaustion was so extreme that the slightest movement, even raising the head, would bring on a fainting fit. I arrived in time to see the child breathe his last. His appearance at the time I saw him was that of a person dying from internal hemorrhage, and the history of the fatal attack tended to strengthen the suspicion. No autopsy could be obtained. In regard to treatment, Dr. Clark stated that when he first met the disease last autumn, the treatment was very varied and unsettled, and he was not satisfied with any method then in use. Seeing a statement that the Dublin and Edinburgh physicians were disposed to rely upon the muriated tincture of iron, he began to advise that remedy. He had since fallen into the practice, now generally adopted here, viz: sustaining the patient by quinia, given freely the muriated tincture of iron, wine, &c., and interfering but little with the membrane. He did not favor the use of mercurials on account of their constitutional effect. Bretonneau used them at first, but was forced to discontinue them for this reason. In reply to the question, whether he regarded diphtheria a different disease from croup, Dr. Clark said that he did; one difference was the frequent occurrence of an abundant exudation in the substance and upon the surface of the membrane, and then the appearance of the membrane itself, the border of the patch being surrounded by an intensely red margin, giving it the appearance of a slough about to separate.

Dr. BUCK said he had seen patients die even after the separation of the membrane. In reference to treatment, he stated that Dr. Lindsley's great reliance in these cases was mercurial fumigations. He had seen recoveries under its use, and in one, particularly, it was continued day and night for eight days. The disease seemed to be kept in check during its use, but any cessation in its application was followed by an aggravation of the most unpleasant symptoms, and it was not until the eighth day that the relief obtained was permanent. The convalescence was gradual and protracted. In this case the exudation on the tonsils was recognised at the first visit, and within twenty-four hours after hoarseness and laryngeal symptoms appeared. He was so favorably impressed with the value of this remedy that he advised its thorough trial. The fumigation was effected by enveloping the child's head with a blanket, and then heating an iron body to a red heat, throwing upon it cinnabar, when the whole was passed under the blanket. When the child was very small it was necessary that the attendant should also be subjected to the fumigation.

Dr. MCCREADY said that he had seen a case with Drs. Parker and Van Buren which was successfully treated by the method of fumigation.

Dr. JAS. R. WOOD remarked that Dr. Lindsley had used the cinnabar in fumigation in croup for many years. He had himself tested its efficacy and could report favorably. Diphtheria, he continued, is a different disease from inflammatory croup, being attended with more nervous prostrations, and the patient running rapidly into a typhoid condition. It is essentially a blood disease. Again, they differ in the location of the exudation; in true croup it does not always commence upon the fauces and extend into the larynx; but in diphtheria he had always first discovered the exudation in the fauces or upon the tonsils, and the laryngeal symptoms supervened soon after.

(To be continued.)

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, MAY 9th, 1886.

E. KRACKOWITZER, M.D., President, in the Chair.

[Continued from page 82.]

CANCEROUS DEGENERATION OF LUNG.

Dr. EUGENE PRUGNET next presented a specimen of cancerous degeneration of the lung, with a history, as follows:

Alexander Plunkett, æt. 28; born in Ireland; single; waiter; was admitted into Bellevue Hospital Jan. 18th, 1860. No hereditary tendency to phthisis or cancer. Patient states that he had always been healthy until about four months ago, with the exception of a severe pain in right side of chest, which has troubled him for the last eight years, and rendered his breathing difficult. About six months since, he first noticed a small lump on the left side, about the level of the convexity of eighth rib, accompanied with an intermittent and lancinating pain, and dyspnoea. At present, he is very much emaciated, having the cachectic appearance of malignant disease, considerable lancinating pain in left side, and dyspnoea, but no cough or expectoration. There is a large tumor on the convexity of the ribs of left side, extending from fifth to eighth rib, measuring about four inches antero-posteriorly, having an elastic feel. The veins on the surface of the tumor are very much enlarged; the intercostal spaces are obliterated. The left half of the chest below the tumor measures an inch more than the right, the right half of the chest alone expanding in the inspiratory effort. The vibration on right side is distinct, indistinct on the left; resonance normal on right side, accompanied with puerile respiration; on left side marked dulness, extending as high as third rib anteriorly, and posteriorly as high as inferior angle of scapula. Respiratory murmur absent on left side, except over the roof of the

lung. Vocal resonance on left side indistinct below the level of third rib. On passing an exploring needle into the tumor, it was found to be perfectly solid. Feb. 22d. Pulse 96, and weak; cough and slight expectoration of mucus; increased dyspnoea; dulness extends to the second rib anteriorly, and spine of scapula posteriorly. The heart is displaced to the right, the apex beating between the fifth and sixth rib of right side, just below the nipple. Dr. Clark ordered diuretics to be given, accompanied with counter-irritation. March 1st. Dyspnoea less marked; cough increased; dulness stationary; physical signs same as before; diuretics and counter-irritation to be continued. March 8th. Pulse 98. The dulness has descended to the level of the third rib anteriorly, and 1 inch below the spine of the scapula posteriorly; respiratory murmur more distinct at the root of lung. April 4th. Pulse 120. Patient is failing rapidly. Dyspnoea well marked; cough more severe at night; appetite poor; tumor growing rapidly; marked oedema of left side of face and arm; dulness extends to the clavicle anteriorly, and above the spine of scapula posteriorly, and there is a total absence of respiratory murmur on the left of the chest; the liver is slightly nodulated to the feel, and extends downwards to within an inch of the umbilicus. April 6th. 6 A.M. he died.

Autopsy, eight hours after death.—Rigor mortis well marked. Brain not examined. Right lung normal; slight serous effusion in right pleural cavity. Heart dislocated to right; some slight evidences of pericarditis, but otherwise healthy. Left lung was found to be degenerated into a cancerous mass, there being no trace of lung tissue left. The diseased lung communicated with the external tumor by means of the fifth, sixth, and seventh intercostal spaces. The ribs were intact. The diaphragm was pushed downwards by the diseased mass; the liver was displaced, and in a cirrhotic condition. The kidneys, spleen, pancreas, mesentery, stomach and intestines were healthy. The external tumor presented a broken-down appearance. On microscopic examination of the specimen, it was found to contain a few cancer cells, pus, and broken-down granular matter. The specimen taken from the lung contained a greater abundance of cancer cells.

The Society then adjourned.

COMPENSATION FOR MAKING AUTOPSIES FOR CORONERS.—

The legal right of medical men to receive compensation for post-mortem examinations before coroners, seems to have been established in this country in a case tried before Hon. Judge Ellis Lewis in 1844, in Lancaster County, Pa. Dr. Washington L. Atlee, writing to the *Med. and Surg. Reporter*, gives the history of that trial as follows:—"Having made an autopsy, October 1843, at the request of the Coroner, I presented a reasonable bill to the commissioners. In their desire to curtail expenses they ordered a less amount to be paid, but as this was not an adequate remuneration for the services rendered, I requested a reconsideration. This was granted, but without a different result. The amount they offered was given merely as a favor, as the law, in their opinion, did not authorize them to pay anything. In order to test the rights of the profession, I instituted suit against the Board for the whole amount of the claim. The jury gave it in my favor. The opinion of Judge Lewis was clear and pointed, and may be read in the *American Journal of Medical Sciences*, Volume xii, p. 538. I believe this is the first time this principle has been judicially settled. Immediately on the refusal of the Commissioners to pay a proper fee, I secured the signatures of the physicians of Lancaster to a paper agreeing to make no post-mortem examination for the Coroner under a fee of twenty dollars to each physician. This, I believe, has been maintained in Lancaster County ever since, and as an autopsy sometimes requires the presence of more than one physician, a single examination has cost the county as high as forty and sixty dollars.

General Correspondence.

DIPHTHERIA—ITS PATHOLOGY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—

A recent number of the *British and Foreign Medico-Chirurgical Review* contains "Some Remarks on the Epidemic Diphtheria of 1857-8," by Dr. Boullon Lagrange. He holds that we are nearer the truth in regarding the disease as one primarily constitutional, manifesting itself on the mucous membrane in the same way as the eruptive fevers are characterized by a rash. "Pathological anatomy," he says, "has demonstrated the *liquid* state of the blood, and the *internal congestions* which result from this condition, and the asphyxia produced mechanically by the false membranes in the air passages."

This much then Dr. Lagrange believes is certainly known, and the knowledge "*deprives us of the excuse for employing heroic remedies.*" He concludes by calling upon chemists and microscopists to study the state of the blood at different stages of diphtheria, which may be the sole means of obtaining a knowledge of the morbid state which certainly precedes the primary modification of this fluid, before the profound alteration unavoidably entailed by the enormous deposition of fibrine upon the mucous membrane.

In my opinion this amounts to just nothing at all. Let us consider this statement. By the term Constitutional Disease, we must, I suppose, understand a disease that involves, if not primarily at least essentially, the blood; and Dr. Lagrange so understands it, for he calls upon chemists and microscopists for information respecting the change which the blood undergoes in this disease. Pathological Anatomy, he adds, has demonstrated that the blood is liquefied, and that internal congestions result from this condition.

Now, what do we understand by liquefaction of the blood constituting a disease that manifests itself on the mucous membrane, *in the same way* as the eruptive fevers are characterized by a rash? Certainly such a liquefaction argues a decomposition of the blood, or of some constituent of the blood. The old writers gave to eruptive fevers the name "*putrid*," because of the liquefied and ammoniacal condition of this fluid. These fevers are eminently asthenic, the blood is *aplastic* in a greater or less degree, and congestions, properly so called, do result from the conditions named.

But is an enormous deposition of thoroughly organizable "*fibrine*" an evidence of such a liquefaction? We answer, No. The liquefaction of the blood in diphtheria is, in its every characteristic, the very opposite of that which occurs in the eruptive fevers, and this is proved by the nature of the "*congestions*" which occur in diphtheria. If the term *hyperæmia* expresses the nature of these "congestions," we have them with a vengeance.

To sum up this matter briefly, the cases of diphtheria that I have seen have been intensely inflammatory, due certainly to liquefaction in the blood, but an intelligible liquefaction; the liquefaction of something that is known, viz., the plastic element of the blood as it is called, albumen. Now, sir, inflammation is essentially this very liquefaction. Fibrine, properly so called, is liquefied into what was once called "*rarefied fibrine*," but which modern writers call the blastema, and which is, both in diphtheria and other diseases, nothing more than dissolved fibrine. In other words, this disease consists, essentially, in a rapid metamorphosis of the plastic element of the blood, and a corresponding exudation of the blastema upon the laryngeal mucous membrane; hence the enormous deposition of "*fibrine*," and hence, also, the excuse for heroic remedies, if any excuse is needed. Diphtheria, as I have seen it, is so much of a blood disease, that it might almost be termed inflammation of the blood. If we ever cure this disease, we do so by rendering

the blood "in degree, "*aplastic*," and this cannot be effected by "gargles or tonics internally," but by antiphlogistics.

B. S. W.

BLACK ROCK, July, 1880.

NOVEL TREATMENT OF INFANTILE CONVULSIONS—PERMANENT PARALYSIS OF THE OPTIC NERVE FROM INJURY.

(To the Editor of the AMERICAN MEDICAL TIMES.)

SIR:

The American Medical Association, during its recent session at New Haven, were invited to visit Trumbull Gallery, and examine the paintings of the Revolutionary Artist, who, to borrow the language of his epitaph, "gave his sword and pencil to his country."

In the "*Autobiography, Reminiscences, and Letters of John Trumbull*," whose works have given name and fame to this Collection of Art, are recorded two incidents of remarkable interest to the Medical Profession.

"I was born at Lebanon on the 6th of June, 1756—the youngest child of these parents; and soon after my birth was attacked by convulsive fits, which recurred daily, and several times each day, increasing in violence and frequency until I was nearly nine months old,—the cause was hidden from the medical men of the vicinity,—when one of my father's early friends, Dr. Terry of Suffolk, who had become an eminent physician, called accidentally to make him a passing visit, and was requested to look at the unhappy child. He immediately pronounced the disease to be caused by compression of the brain, showing my parents how the bones of the skull, instead of uniting in the several sutures, and forming a smooth surface, had slipped over each other, forming sensible ridges on the head, by which means the brain, not having room to expand, convulsions followed. 'Can the child be relieved?' was the anxious question. 'Nothing but the untiring care of the mother can effect a cure, and this can be done only by applying her hands to the head of the child daily, and many times a day, and gently and carefully drawing them apart. If the bones do not already adhere too strongly, it is possible that by this means they may be separated, and reduced to their proper junction in the sutures. If this had been attended to at the birth it would have been easy; now, it is barely possible. Medicine is useless, and if relief cannot be obtained by this method I know no other; and the poor child must either die early, or if he should live, become an idiot.' My mother followed this prescription with unremitted care; by degrees favorable symptoms began to appear—the paroxysms of convulsion recurred less and less frequently, until at about three years old, the natural form of the head was restored, and they ceased entirely. Thus, by the kindness of Divine Providence in making known the cause of the disease, and by the affectionate care of my mother, a life was snatched from early extinction which has been prolonged to the unusual age of eighty-five years."—*Pages 3 and 4.*

The treatment above described might be useful when the fontanelles prematurely close, from which cause, it has been recently stated, convulsions result.

In another portion of the autobiography Col. Trumbull writes—"At the age of four or five an accident befell me of a serious nature. After my recovery from my early sickness I became the favorite plaything of my two sisters, who were more than ten years my seniors. A door opened from their bed-room upon a flight of stairs, leading direct to the ground floor, without a landing. I was frolicking with them in this room with all the gaiety of young and newly acquired health; the door was unfortunately open, and in my race I plunged headlong down the stairs. I was taken up insensible—my forehead, over the left eye, severely bruised; but I soon recovered, and although for some time I squinted with the left eye, no other evil was

suspected, until several years after, when happening to shut the right eye, I found I could not see. The optic nerve must have been severely injured, for although the eye recovered entirely its external appearance, yet vision was so nearly destroyed that, to this day, I have never been able to read a single word with the left eye alone."—Page 6.

At the age of eighty-five he writes, "Should my long life be still further prolonged I trust that they"—referring to a series of revolutionary paintings, which within a few years he had commenced, and five of which he had finished—"will all be completed, and they will remain a legacy to posterity." His eye was not dim nor his natural force abated. Notwithstanding his life abounded in very severe trials and unusual vicissitudes, he lived to the age of eighty-seven years. Beneath the building which was erected for the exhibition of the works of his genius, his remains were most appropriately placed.

R. R.

EXECUTION OF HICKS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—As there is a difference of opinion as to the cause of death, at almost every execution, by hanging, I take the liberty to submit the following observations, to use as you think proper.

Having lately met with the assertion of Mr. South, that in persons executed by hanging there is almost invariably fracture of the os hyoides, I determined to take advantage of the first opportunity to test its truth.

Last week I witnessed the execution of the pirate Hicks, being so placed that I could watch closely the whole proceeding. When the weight fell he was not drawn up suddenly or with a jerk, as I afterwards ascertained, owing to the weight striking two or three rounds of the ladder, breaking them in its descent. The knot fell upon the side of the head just above the ear, without special pressure upon any part of the spinal column; there was slight muscular spasm continuing for ten minutes, when there was a distinct but not violent convulsive movement of the legs and arms so far as the cord binding them would permit. Would not a fracture or dislocation, pressing upon the spinal cord with sufficient force to cause death, have produced earlier paralysis of the motor nerves? I am inclined to think that fracture of the spine is rather the exception than the general rule in death by hanging—and that death is the consequence of suffocation accompanied by displacement or fracture of this bone of the throat.

The os hyoides is placed just below the chin, being one point of attachment for almost all the muscles of the throat employed in swallowing and breathing, as well as the tongue, maintaining the calibre of the tube through which the air passes to the lungs. In hanging the greatest stress of the rope falls immediately upon this bone, displacing or fracturing it, thus blocking up the passage for the air, and dislodging the attachment from which the muscles of respiration act.

Upon examining the neck after death the body of the bone was found to have been forced upwards and backwards, apparently almost touching the spine—separated at least an inch from the thyroid cartilage which remained in its natural position—thus completely occluding the larynx. In this necessarily hurried examination I could not determine whether the bone was or was not fractured.

The practical bearing of this would be:—in cases of accidental hanging, after cutting the person down, we should first of all ascertain if this passage is free; if not, an opening could be made below the thyroid cartilage to allow the air admission to the lungs, to facilitate the efforts at resuscitation of the victim.

Yours truly,

WM. HENRY CHURCH.

New York, July, 1880.

CORRECTION.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In reading the proceedings of the American Medical Association in the *Times* of July 7, I see that you give Dr. Shattuck of Boston, the credit of introducing the resolutions on the part of the Committee of the Association. This does Dr. Blatchford, of Troy, injustice, as he was Chairman of that Committee, and made the report, and especially as they were the only resolutions adopted for the benefit of medical progress in an educational point of view. Trusting you will make the correction,

I remain one of that Committee, and
Yours respectfully,

WM. BRODIE, M.D.

DETROIT, July 16, 1880.

Obituary.

THE LATE JOSEPH HERZKA, M.D.

DR. JOSEPH HERZKA was born in Hungary in the year 1811. His father being a small shopkeeper, he was destined for the same business. But having higher aims, though he could obtain no assistance from his poor parents, he resolved to obtain a classical education by his own exertion. At twelve years of age we find him at the Latin school in Pressburg, Hungary, an indefatigable student, obtaining the scanty means of subsistence by instructing less talented and industrious schoolmates. Having passed through a collegiate course, he commenced studying medicine, in 1843, at the University of Vienna, and became a favorite pupil of Prof. I. Scoda. When, in 1848, the Revolution pervaded Europe, he flung himself without reserve upon the bosom of the storm. Being a powerful writer as well as a ready and popular speaker, his influence for the popular cause was great. After the subjugation of Vienna, October 1848, he managed to reach Hungary, but Field-Marshal Windischgratz sweeping everything before him, and Dr. Herzka being unwilling to desert his post, he was surrounded by the Austrians. He made an almost romantic escape, in the dead of the winter, 1849, through Poland and Germany to France. Not being permitted to stay in Paris, he came in the fall of 1849 to New Orleans, and the subsequent year to New York. In 1852 he was, for a few months, an assistant physician at the Quarantine Hospital, Staten Island. He then settled as a practising physician in Tompkinsville, Staten Island, where he remained until three weeks before his death. In 1852 he edited, with Dr. W. von Roth (since dead) and E. Krackowitzer, a medical journal in German, which enterprise was abandoned after one year's existence. The same year he married an American lady, who survives him. Personally he did not become intimately acquainted with many medical men, the seclusion on Staten Island making it difficult to keep up frequent intercourse with the profession of the metropolis. Although engaged in extensive practice, he never neglected the cultivation of his favorite science. Notwithstanding his health declined visibly during the last three years, he laid out for himself far-reaching plans of original investigation. THE NEW YORK JOURNAL OF MEDICINE, of last year, bears testimony to the industry, ingenuity, and originality of his disquisitions relative to the physical causes of the respiratory sounds and the voice. He has certainly demolished the universally received theory respecting the physical conditions which produce the vesicular respiratory murmur. His own theory seems to bear the test of sound physical laws, and even if it should be shown to be erroneous, will always mark its author as a bold and independent thinker and a dexterous experimenter. Self-reliance and an acutely critical mind, relying upon no

authority, were the main characteristics of his mental constitution; and if we add to these an indefatigable industry the medical profession has certainly reason to deplore the early loss of so gifted a member. He died May 23, 1860, in this city, from tuberculosis of the lungs and the larynx at the age of forty years.

Medical News.

THE NEW YORK MEDICAL COLLEGE, it is rumored, is about to be reorganized with an almost entirely new faculty.

THE LONG ISLAND COLLEGE HOSPITAL, Brooklyn, closed its first session on the 24th inst., having twenty graduates in a class of upwards of sixty matriculants. The exercises consisted of an address by Dr. T. L. MASON on the part of the trustees; a valedictory to the class by Prof. AUSTIN FLINT, on the part of the faculty; and an address by Dr. MORRISON on the part of the graduating class. The first session of this school has proved highly satisfactory to the trustees, and augurs its permanent success. The following are the names of the graduates:

Arthur Du Bercieu, New York; Samuel Jackson Morrison, Virginia; Chas. C. Gordon, Florida; Lucien Demainville, New York; Edmund Lynch, Brooklyn; George R. White, Kentucky; George L. Kirby, North Carolina; Jas. Webb, Maine; Philo C. Pease, New York; Paul A. Barrier, North Carolina; Chas. O'Leary, Cincinnati; Stephen P. Burdick, Iowa; Nemies Cole, Ohio; Rufus King Browne, New York; John Scudder, India; Wm. J. McMahon, Alabama; Fowler Prentice, Brooklyn; Rufus A. Shimmock, North Carolina; Emile J. Sabal, George Henry, Canada; Alexander McDugald, North Carolina.

ASSISTANT Surgeon A. M. Fauntleroy has been ordered to report, on the 16th inst. at Carlisle Barracks, Pa., for duty as far as Fort Leavenworth with the recruits about to be sent to New Mexico; thence to proceed to Fort Laramie, N. T. and relieve Assistant Surgeon E. W. Johns.

NORTH CAROLINA has a Board of Medical Examiners appointed by the Governor, whose duty it is to examine all persons desiring to practise medicine in that State, and grant licenses to those whom they find qualified. No one is allowed to assume the duties of a physician in that State who is not licensed by this body. The following gentlemen were recently licensed:

Drs. L. P. Warren, Edenton; W. A. Blount, Washington; J. P. McCombs, Charlotte; J. W. Shinn, Rowan; W. W. McKinzie, Salisbury; L. W. Robinson, Sampson; W. A. Dunn, Wake; H. H. Harris, Wake; J. H. Leary, Bertie; R. S. Petway, Edgecombe; W. H. Lilly, Richmond; J. W. McGee, Kenansville; W. D. Somers, New Hanover; P. F. de St. Clair, New Hanover; C. G. Cox, Onslow; G. N. Ennett, Onslow; D. W. Shaw, Moore.

A CASE was tried last Saturday in the Court of Common Pleas, in which a riding-master brought an action against Mr. Hacon, of Hackney, alleging that this gentleman had not treated him properly for an injury to the hip. It appeared that the plaintiff had a fall, suffered great pain for some time after about the hip, and after some months the limb became shortened from the effects of chronic arthritis. Mr. Quain thought the patient ought to have been kept at rest from the first. Mr. Canton supported the same view; but Mr. Paget and Mr. Pollock thought Mr. Hacon had pursued a proper course of treatment, and that keeping the patient in bed, considering his age, would have been improper. The following remarks of Lord Chief Justice Erle are of great importance. He said:—"The real question is not whether Mr. Herring was cured. It is the most intensely pernicious mistake, to think that an action would lie against a Medical man, because he does not cure his patient in every complaint. All that he is bound to do is, to have competent skill, and to use it to the best of his judgment. When he has done that, he has done his duty; and he is not liable for any consequences which ensue,

which may be utterly beyond the control of man. According to the exceedingly valuable evidence which has been given in favor of Mr. Hacon, when he attended this man he brought to bear upon his case a considerable degree of skill; and a disease supervened for which he is no more responsible than I am. If you are all of that opinion, a verdict will be taken for the defendant; which seems to me most satisfactory."

A verdict was then taken for the defendant. We congratulate Mr. Hacon, and the profession generally, that law and justice for once went hand in hand.—*Medical Times and Gazette.*

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 14th day of July to the 21st day of July, 1860.

Deaths.—Men, 81; women, 65; boys, 178; girls, 172. Total, 496. Adults, 146; youths, 18; children, 332. Males, 259; females, 237. Colored persons, 6. From acute disease, 291; chronic disease, 159; and violent causes, 35. 278 infants died under two years of age. Among the causes of death we notice from apoplexy, 6; congestion of brain, 14; cholera, 2; cholera infantum, 104; cholera morbus, 9; infantile convulsions, 27; croup, 3; diphtherite, 4; diarrhoea, 20; dysentery, 5; scarlet fever, 18; measles, 2; small-pox, 2; inflammation of bowels, 2, of brain, 12; of lungs, 12; consumption, 47; dropsy in the head, 18; infantile marasmus, 37; debility, 12. Classification: Brain and nervous system, 92; respiratory, 87; and digestive 206.

JULY.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
15th.	29.94	.06	77	64	88	11	18	SW.	8	.11
16th.	29.86	.11	82	72	92	11.5	18	SW.	2.5	.12
17th.	29.80	.18	78	70	88	14	20	SW.	4.5	.01
18th.	29.01	.05	76	66	86	9	14	NE. to SE.	4.5	.01
19th.	29.91	.19	82	75	88	7	11	SE.	4.5	.01
20th.	29.88	.07	87	74	96	11.5	18	NW to SW.	4.5	.01
21st.	29.64	.30	88	73	90	11	14	S. and W.	4.5	.01

REMARKS ON THE WEATHER.—15th. Fine with light wind till evening. 16th. Sultry shower afternoon and night. 17th. Fine and dry. 18th. Sultry, partial solar eclipse A.M. Temperature three degrees lower in consequence. 19th. Very sultry, light rain 10 A.M. 20th. Clear and hot, a brilliant planetary meteor crossed the horizon from west to east at a great altitude at 9½ P.M. 21st. Variable light rain at 10 A.M. and 4 P.M., gale at night.

The mean temperature of the week was about ten degrees higher than that of the previous one, and its humidity also much greater. The increase of mortality was 54; that from diseases of the digestive organs, 63; and that of infants 60.

MEDICAL DIARY OF THE WEEK.

Monday, July 30.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Elliot, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, July 31.	{ BELLEVUE, Medicine, Dr. Thomas, half-past 1 P.M. CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
Wednesday, Aug. 1.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Griseom, half-past 1 P.M. BELLEVUE, Surgery, Dr. Sayre, half-past 1 P.M. NEW YORK ACADEMY OF MEDICINE, 8 P.M.
Thursday, Aug. 2.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Loomis, half-past 1 P.M.
Friday, Aug. 3.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Aug. 4.	{ BELLEVUE, Surgery, Dr. Church, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Griseom, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.

Original Lectures.

CLINICAL LECTURE ON DROPSY.

DELIVERED AT THE NEW YORK HOSPITAL.

BY H. D. BULKLEY, M.D.

ATTENDING PHYSICIAN.

THE occurrence in our wards, at the present time, of several cases illustrating the leading forms of dropsical effusion furnishes an opportunity which I propose to improve, of studying this morbid condition in connexion with bedside observation. I need hardly say to you that dropsy is always a mere symptom, and that we should always feel called upon to endeavor to ascertain upon what it depends. But though only a symptom, it is often one which assists us materially in our diagnosis, and not unfrequently one which aggravates other symptoms, and which it is, hence, very important to remove, if possible. It is sometimes one of the earliest indications of disease, and at other times only appears when disease has made great progress.

I have had the opportunity, within a few days, of directing your attention to five cases which afford us illustrations of three leading forms of dropsy, and I propose now to glance at these cases in comparison and in contrast with each other, and shall confine my remarks chiefly to the direct cause of the effusion in the different cases, the different points at which the effusion more commonly makes its appearance, and the general principles of treatment as modified by the different causes. I have, I believe, already called your attention more or less in detail to all these cases, and shall therefore now only review their leading points, and especially those which bear upon the plan which I have marked out for myself. We have also an interesting case of extensive effusion into the pericardium still under treatment, and nearly well, and one or more cases of pleuritic effusion; but I prefer to reserve remarks on these for some future occasion.

In two of these five cases, the dropsy is connected with disease of the heart or of the large vessels; two others are cases of abdominal dropsy or ascites, and the fifth is one of renal dropsy.

The first of the cases dependent upon disease of the heart or large vessels is that of a young man, 22 years of age, who was attacked with rheumatism while at sea about four years ago, by which he was confined to his bed ten weeks, and unable to attend to his duties for as much longer time afterwards. About one year after this he was attacked with hæmoptysis, an indication in his case that there was congestion of the lungs, which doubtless depended upon disease of the mitral valve, evidence of the existence of which, at the present time, is furnished by the fact that there is a loud murmur with the first sound of the heart, loudest at the apex. There is also evidence of hypertrophy of the heart, and he was suffering soon after he came into the hospital with severe dyspnoea, depending upon congestion of the lungs. The dropsy only appeared a few weeks ago, so that we have it in the present case as one of the latest symptoms.

Let us now glance at the seat of the effusion in these different forms of dropsy and the order in which it affects different parts, and especially as modified by the particular cause in each variety. In dropsy depending upon affection of the left side of the heart, the swelling commences, I believe, invariably in the lower extremities, the parts most distant from the centre of circulation being those which experience the effect of the diminished power of the central organ. There are other causes entering into the production of this form of dropsy to which I shall allude further on. Of this we have a specimen in the case of the patient with mitral disease just alluded to, whom you have had an oppor-

tunity of examining. In other cases, and these form a very much smaller proportion, we have the cedema commencing about the chest and in the upper extremities, and at first, at least, confined to these parts—and these are cases in which the disease is confined to the right side of the heart or large vessels—and of this you have an instance in the patient, a German, 66 years of age, a farmer by occupation, the particulars of which I have several times pointed out, who, in addition to extensive effusion into his lower extremities, has cedema of the arms, and especially of the dorsal surface of the hands, which was at first confined to the dorsal part of the right hand. In this case, there is also fullness of the veins on the right side of the neck and at top of the sternum, but no pulsation in them. In this case, as I have already mentioned to you, I can discover no physical signs of disease of the heart itself, and suppose the cedema of the upper extremities to be owing to some cause interfering with the return of the blood to the right side of the heart, probably some morbid growth, as a tumor, either aneurismal or of some other kind. This point I do not propose to discuss at present, and only allude to the case as an illustration of one and rather rare modification of dropsical effusion. Watson, in his admirable work on the Practice of Physic, gives an interesting case of this form of dropsy.

In renal dropsy, we have no special cause, as in cardiac disease, why the effusion should commence at the extremities of the body, though it not unfrequently does commence there, as it seems to have done in the case of albuminuria now under our observation; but we find it in about one half the cases commencing in the face, producing puffiness of the face, and often of the eyelids. The scrotum is another point at which the patient often discovers the first indication of dropsical effusion in albuminuria, and afterwards in the extremities, and still later in the abdomen, and often, but slightly, into the abdomen, even after the scrotum and lower extremities have become very much distended. The late Dr. Todd, of London, remarks that a common order is the scrotum, eyelids, face, then the lower extremities, and finally, the upper extremities. In some cases, the face is but very slightly affected, while, in other cases, its distension by fluid gives a characteristic appearance to the physiognomy of the patient.

In abdominal dropsy or ascites, the swelling commences in the abdomen, and is often confined to it for a long time, this part being sometimes enormously distended with but little affection of the legs and feet. This form often comes on so insidiously that patients are only made aware of it by finding their clothes tighter over those parts. We should expect no other seat of effusion in this case when we remember, what I believe we may state to be universally and invariably true, that when the effusion commences in the abdominal cavity, the cause must be sought for within that cavity, and nowhere else.

We will next look at the causes more directly acting to produce dropsical effusion under these different circumstances. The leading causes acting in cardiac dropsy are, 1. Weakness of the heart itself, and consequent inability to propel the blood with sufficient force to reach the extremities; 2. In advanced cases, a watery condition of the blood, which tends to favor the exudation of serum which takes place; but, 3. The most efficient cause is obstruction to the natural course of the circulation in the heart itself, produced by disease of its valves. We have an additional obstacle to the flow of blood, arising from the congestion of the lungs in the one case and of the liver in the other, to which these valvular diseases are so apt to give rise. All these causes must therefore be taken into consideration in the selection of means for the removal of the dropsical effusion.

In by far the most common form of abdominal dropsy, that dependent upon cirrhosis, we have, in the peculiar condition of the liver produced by that disease in an advanced state, a constant and unsurmountable obstacle to the portal circulation, and hence, in most cases, incurable dropsy.

This condition of the liver prevents, at the same time, and for the same reason, the entrance of diuretics into the circulation through the liver, so that they are prevented from reaching the kidneys by that route at least, and we thus have not only a permanent cause of dropsy, but a mechanical obstacle to the introduction, through this channel, of the ordinary remedies used to remove it. Other forms of disease of the liver sometimes give rise to dropsy, but much less frequently than cirrhosis, and to a much more limited extent. Enlargement of the spleen is supposed to produce the same effect, but statistics show that this is very rarely a cause of dropsical effusion to any marked degree.

In one of the cases of ascites shown you, we have great distension of the abdomen, and in connexion with a cause which we find it difficult to appreciate. You will remember it as the case of a sailor, 28 years of age, who entered the hospital for the first time in October of last year, with abundant effusion into the abdomen, and also oedema of the lower extremities, and who was suffering from malarial cachexia contracted at Aspinwall, upon the anæmic state produced by which the dropsical effusion was at first supposed to depend. Under the influence of rest in the hospital, and the use of chalybeates, the oedema of the feet and ankles disappeared, but the ascites remained without much change—diuretics produced little or no effect, and it was not until after the free use of elaterium, that he was so far relieved as to return to his occupation as a sailor. A second voyage to Aspinwall brought on another attack of ascites, for which he was treated here, but with what remedies I have not ascertained. He went again to Aspinwall, and on the 30th of June entered the hospital with a third attack of ascites, when he came a second time under my care. His general health seems to be but little affected, there is little or no emaciation, his pulse is nearly natural, he is free from paroxysms of fever, and seems to suffer from little except the effusion into the cavity of the abdomen. Moderate enlargement of the spleen can be felt now, as it could be in October last, but no enlargement of the liver can be detected, nor is there much enlargement of the epigastric veins, as we so usually find in advanced cases of cirrhosis. To what must we attribute the dropsical effusion in this case? The liver and spleen present no evidence of disease sufficient to account for such an effect. The fact that the disease has already disappeared twice, would seem to discountenance the idea that we have a case of cirrhosis, while the recurrence of the effusion for a third time, each time after exposure to malarial poison, would seem to point to some connexion between these as cause and effect. May we not attribute the effusion in this case to congestion or subacute inflammation of the serous lining of the abdomen, which has relieved itself by the effusion, as we see in the pleura, pericardium, etc.? I have seen such an effect follow this cause in one other case, or at least have seen effusion into the abdomen follow exposure to malaria.

In the remaining of the three forms of dropsy, of which our cases furnish an illustration, the renal, we have a diseased state of the kidneys themselves, as the immediate agent in its production, and acting more or less decidedly in promoting effusion according to their different pathological conditions. In the acute form, with enlarged kidney, the obstruction to the normal action of the organ is greater than in the contracted or gouty kidney, and hence we usually have a larger amount of dropsical effusion than in the latter, even though the condition of the patient may be more anæmic than in the former. But in this, as in other diseases, we sometimes have a watery state of the blood contributing its share to the dropsical effusion, and also, as complicating nearly, if not quite half of the cases, some form of organic disease of heart, which may add to the amount of effusion in one or more of the ways already alluded to.

In the diagnosis of the three forms of dropsy to which our remarks have been more particularly confined, in connexion

with the cases in our wards, the seat of the effusion may be considered as pathognomonic of at least the seat of the lesion in one form, that of ascites, in which we always seek the cause within the cavity of the abdomen itself; and it is, in a certain proportion of other cases, an important auxiliary, as in those cases of albuminuria in which the swelling commences in the face. Indeed, there is something so characteristic in the doughy and anæmic expression of the countenance, with distended cheeks and puffy eyelids, that we see, in some cases of Bright's disease, that we can hardly fail at once to recognise the nature of the lesion. Perhaps we are also safe in saying that when the effusion is confined to the upper part of the body and upper extremities, the seat of trouble is in the right side of the heart, or the vessels leading to it.

When the swelling commences in the extremities, an examination of the physical condition of the heart, will enable us to say whether the cause of the dropsy is in that organ. If no cause for it is found there, we next examine the urine for albumen, by means of both heat and nitric acid, and determine by its presence or absence, whether it is or is not a case of renal disease. If there are no physical signs of disease of the heart or of the large vessels, and there is no albumen in the urine in a case in which the effusion is confined to the cellular tissue of the lower extremities, we have good reason for attributing the trouble either to an exhausted state of the system, or to a watery condition of the blood, or to these two causes acting together.

The three emunctories upon which we depend for the removal of dropsical accumulations are the skin, the bowels, and the kidneys, and we direct our remedies to one or more of these organs, according as we find them in a more or less favorable condition for their action.

In cardiac dropsy, the kidneys and the bowels are the organs upon which we should most naturally depend for the removal of the accumulation, and hence the frequent resort to certain forms of diuretic remedies and purgatives so common among practitioners—and in consequence of the tendency to congestion of the liver in some forms of cardiac disease, we find it important often either to act decidedly upon the liver from time to time by means of some mercurial purgative, or to combine a mercurial in smaller doses with our diuretics, so as to produce an alternative effect, as is done in that combination so long in use as to become almost a classical prescription, that of Dr. Baillie, of London, consisting of equal parts, one gr. each, of calomel, squills, and digitalis. This latter article owes its introduction into this combination to its supposed effect in retarding the circulation, and thus diminishing the frequency of the pulse, upon which its diuretic properties are said to depend. This pill, with the slight modification of the substitution of the blue pill for calomel, our patient with extensive oedema of the lower extremities, and with marked preponderance of effusion in the right hand, has been taking for several days and with some apparent benefit; but it has affected the bowels so much within a day or two that we have concluded to suspend it, and return to the acetate of potash and infusion of buchu, which he had been before taking. The quantity of urine passed by this man, during twenty-four hours, has ranged from sixteen ounces to twenty-four ounces during the last ten days, and had yesterday reached thirty ounces, while to-day it is marked as low as eight ounces. This low figure must not, of course, be taken for the whole amount of urine passed during twenty-four hours, and certainly not as a representative of the amount of fluid which has passed from his system, because the free operation of the pill upon the bowels has carried off much fluid in that way, and has also prevented the collection of the urine for measurement.

In the slighter cases of cardiac dropsy, rest in a recumbent position, and the use of means to relieve congestions when they occur, will often be sufficient to remove the effusion, even without the aid of diuretics, or with some of the milder ones. This has been the case with the man in our

wards with mitral disease, whose dropsical effusion, which was well marked when he first entered, disappeared after a few days, under the use of the means (dry cupping, etc.) for the relief of the congestion of the lungs from which he was suffering when he came to the hospital, and the acetate of potash and infusion of buchu as a diuretic.

Dr. Golding Bird divided diuretics into two general classes, the specific, or those which act upon the kidneys by merely stimulating them to increased action, without increasing the quantity of solids in the urine; and the chemical or alterative, which at the same time that they promote the discharge of urine, favor certain changes which are constantly taking place in the system, and thus increase the amount of solid elements in that fluid, and act as true depurants. Under the former head belong squilla, turpentine, copaiva, juniper, etc.; under the latter, the alkalies and their carbonates, and more particularly their combinations with vegetable acids, as the acetates, tartrates, and citrates of soda and potash. Both of these classes of diuretics are used in cardiac disease; but I regret to say with doubtful success, as are all the remedies addressed to the kidneys in dropsy dependent upon valvular or other obstructions of the heart and large vessels. More dependence is usually to be placed upon means used to relieve congestions, and to control the action of the heart, and keep up the tone of the system.

In ascites dependent upon cirrhosis of the liver, diuretics afford little or no chance of relief for the two-fold reason that they cannot pass through the liver, and hence are deprived of one very important route for reaching the kidneys, and that if they could reach them through this channel, they would be inadequate to the relief of this symptom, because it depends upon a permanent, mechanical cause—and even if the accumulation were removed, it would constantly recur from this cause. The woman whose case forms one of our list passes, on an average, only about twelve ounces of urine in twenty-four hours, and the quantity of effusion into the abdomen has remained with little change since last February, when she was admitted into the hospital, notwithstanding she has been using some form of diuretic all of the time. In these cases, the state of the mucous membrane of the stomach and bowels is usually such as to forbid the use of active purgatives, while the general condition, which is commonly much below the standard of health, forbids the use of remedies which will deplete the system, or interfere with its nutrition. I would say, however, that one case of supposed well-marked cirrhosis, in a man under the care of one of my colleagues in the hospital, last year, in whom the effusion reached such an extent at one time as to require tapping for relief of urgent symptoms produced by distension of the abdomen, was apparently entirely cured, and went out from the hospital wholly free from effusion into the abdomen, under the continued use, for several weeks, of large doses of the iodide of potassium. But such cases are exceptions to the rule which dooms patients with confirmed cirrhosis to a constant downward tendency, though often at quite a slow rate of progress.

The case of our other patient with effusion into the abdomen, and to a much greater extent than in the one just spoken of, and which we have supposed to depend upon some other cause than cirrhosis, and to be connected in some way with malarial influence, differs from this in several respects. Among the points of difference may be mentioned the recurrence of the effusion for the third time, but slight, of enlargement of the superficial veins of the abdomen, the general good health of the patient, and the effect of remedies. The quantity of urine which, when first measured, seventeen days ago, amounted to sixteen ounces in twenty-four hours, now marked at sixty ounces during the last twenty-four hours. He has been taking the acetate of potash and infusion of buchu, until the past few days, when the compound diuretic decoction of the hospital consisting of squilla, senega, juniper berries, and sweet spirits of nitre, was substituted, since which the quantity

of urine has increased from forty-eight to sixty ounces in twenty-four hours. His bowels have been loose for a part of the time since he entered the hospital, and he has taken no remedy to act upon them for the removal of the effusion. You will remember that on his first attack, the free action of elaterium was the only remedy which seemed to reach his difficulty. I could remark, in passing, that in other instances within a few days there has been an increase in the quantity of urine discharged after a change from the acetate of potash and infusion of buchu to the diuretic just mentioned. You will notice that this decoction contains articles which come under Dr. Bird's first head, that of special diuretics, articles which stimulate the kidneys without producing any special change in the quantity of the urine passed.

In renal dropsy, especially in acute cases, in which the effusion depends almost wholly upon the congested or otherwise altered state of the kidneys themselves, diuretics must be sparingly used, if used at all, and we must depend for the removal of the dropsical accumulation upon the skin and the bowels; and of late years, we have been in the habit of directing our remedies mostly to the skin. This is done by means of diaphoretics internally, such as spiritus mindereri, in combination with ipecac or tartrate of potash and antimony, unless forbidden by irritability of the stomach, as sometimes occurs, either with or without a small proportion of sweet spirits of nitre, and the hot air bath externally. This bath is given by means of a very simple apparatus, consisting of an upright and a horizontal tin tube, about three inches in diameter, joined at right angles, and arranged at a proper height for introduction under the bed-clothes, through which is made to pass a stream of heated air by means of an alcoholic lamp beneath it. This apparatus, by the way, is used for other purposes, such as cases of collapse, and is so simple in its construction, and so cheap in its cost, and at the same time so efficient, that I should recommend practitioners to provide themselves with one. This is administered three times a day, for about twenty minutes each time, with the effect usually of causing the patient to perspire very freely. Under the use of this means alone, the kidneys will sometimes begin to act at once, and in a few days, the effect upon the dropsical swellings will be very marked. I have known the quantity of urine increased from a few ounces (sixteen ounces in one case) up to over a hundred ounces in twenty-four hours. You would probably hardly anticipate that a remedy acting so directly upon the cutaneous surface would prove so powerful a diuretic—but such is the fact. And how does it produce this result? Doubtless by relieving the congestion of the kidneys, and thus enabling them to resume their functions, which the congestion had before prevented.

The same indication is fulfilled by depletion over the region of the kidneys by means of cups or leeches in recent cases, and when there is febrile excitement. In the cases received into the hospital, we more frequently use dry cups; and both here and in private practice, I am in the habit of applying a strong mustard poultice over the lumbar region several times in the course of the day, and keeping that part well covered the rest of the time by a warm emollient poultice.

Opinions respecting the use of diuretics in albuminuria, have undergone more or less change with the increased knowledge of the pathology of the disease, and may be now said to be undergoing another modification. Before the congestive and occasionally inflammatory character of the lesion were recognised, diuretics of different kinds were freely used, and often the principal remedies depended on. When the state of the kidney, which now exists in the acute cases, was recognised, the use of diuretics of every kind was strictly forbidden; and about this time, the present prevailing mode of treating the disease by diaphoretics, and especially by the hot-air bath, was brought forward by Dr. Osborne, in a work on the subject, and soon afterwards was inaugurated as the treatment in our hospital

by the late Dr. Swett, then one of its attending physicians, a precedence which it has retained ever since. It is a fact of some interest in connexion with the history of the therapeutics of this affection of the kidneys, in our hospital at least, that for several years immediately previous to this, most of the cases of albuminuria were treated by small doses of the bi-chloride of mercury, a mode of treatment introduced by the late Dr. Wotherspoon, afterwards of the army, then resident physician of the hospital, and with a measure of success which was thought to justify its almost universal use; and I have recently been informed by a medical friend in extensive practice in a neighboring city, that he still treats his cases of this disease in this way. This fact is rendered the more interesting by the circumstance that mercury is now considered by many writers so injurious in this disease, that we are cautioned against its use in its treatment.

The milder forms of diuretics are now recommended in albuminuria, such as the acetate, bi-tartrate, citrate, and sometimes the nitrate of potash, either with or without the sweet spirits of nitre, and probably act as auxiliaries in some cases. The muriated tincture and other preparations of iron, which are so urgently indicated in most forms of albuminuria, to remove or modify that morbid condition of the blood so intimately connected with the production of the disease, may assist in some measure in removing the serous effusions which take place, by improving the condition of the blood, and thus aiding to remove one of the predisposing causes of the disease—for I must remind you at the close of my remarks, as I did at the commencement of them, that dropsy is but a symptom, and you will observe that I have confined myself to the study of it in this light, without attempting to touch upon the many other important points connected with the cases which I have presented to you, nor even upon its therapeutics to more than a limited extent. The study of different diuretics and of their mode of operation, would furnish material for at least another lecture, while the consideration of other means used for the relief of dropsy, such as tapping, acupuncture, incisions, bandaging, etc., would require more time than we can now devote to it. The subject of albuminuria especially, is one of great interest, and I shall hope on some future occasion to direct your attention more particularly to its pathology and its treatment, in connexion with cases of the disease, which our wards seldom fail to present to us, and often to a considerable extent.

HOMŒOPATHY IN CLEVELAND.—We sincerely regret, says the *Ohio Med. and Surg. Journal*, to learn that the principal, if not the only, hospital resources of our friends of the Cleveland Medical College, have been wrested from them and awarded to the homœopaths. For a number of years our friend Professor Weber has occupied the post of physician and surgeon to the county infirmary and city hospital of that place, to which his services have been given gratuitously. Recently he was superseded by the appointment of the professor of surgery in the Cleveland Homœopathic College. We suppose the latter will occupy the place till some specious representative of spiritualism, or some later edition of humbuggery, supersedes him. It is not at all likely that the city council of that city will very soon award it to any one not the representative of some form of humbuggery.

SEAMEN'S RETREAT.—The whole number of Seamen admitted during the past year, was 1,104. There remained on the last day of 1858, 132; making a total of 1,236, who were under treatment during the year 1859.

There were discharged, cured, . . .	910
" " " relieved, . . .	111
" " " by request, . . .	27
" " " died, . . .	64

Total number discharged, 1,112

—Report for 1859.

Original Communications.

REPORT OF THE CASES OF FRACTURE OCCURRING IN PRIVATE PRACTICE,

WITH OBSERVATIONS UPON TREATMENT.

BY DAVID P. SMITH, A.M., M.D.

OF SPRINGFIELD, MASS.

(Continued from page 60.)

FRACTURE OF THE CLAVICLE.

SEVEN cases of fracture of the clavicle have come under my notice. Of these, three occurring in men, were attended with very marked displacement. In the case of these three I used the "adjuster for fractured clavicle," invented by J. Crawford, M.D., and manufactured by G. A. Watkins. One, in three weeks, had firm union without the slightest deformity; another showed a slight protuberance at the site of injury; and the third, disgusted with the galling and restraint of the apparatus, threw it off at the end of two days, and returned no more. Four cases were children under twelve years of age, and were easily managed by very simple dressings. In the last one I used nothing but adhesive straps. They retained their place well, and, although applied to a very unruly child, furnished a cure without any deformity.

The "adjuster" used in three most difficult cases is certainly a very perfect instrument, and applied with care and judgment cannot fail of being productive of the best results. Its comparative expense does not appear great when we reflect that it is of great use in some fractures of the humerus.

FRACTURES OF THE HUMERUS.

Eleven cases of fracture of the humerus have fallen to me. Of these, two were of the shaft of the bone just above its middle third; three near the middle; one, as near as could be ascertained, at or near the anatomical neck, and five of the condyles. The following are the only cases in this collection worthy of special note:—

Case 1.—March 1st, 1854. Saw an employé on the H— and S— Railroad who had sustained a severe compound fracture of the right forearm. Both radius and ulna were fractured, and through a large ragged wound the finger could easily explore the ends of the fractured bones. No loose fragments could be discovered, and on extension being made, and the bones being placed in their proper position, warmth returned to the hand, and a slight thrill to the arteries. As the elbow joint was uninjured, and as the man was only twenty years of age, the formidable nature of the injury did not appear to me to imperatively demand the removal of the limb. In this view of the case I was fully sustained by Dr. Beach. The limb being carefully adjusted on a firm splint he was placed in a quiet room with a good watcher, and under the influence of a large dose of opium passed a quiet night. The next day the limb swelled immoderately, and his pulse began to quicken; his tongue assumed a dry glazed appearance, and muttering delirium came on. No pus formed in the limb, and no signs of gangrene. Perfect quiet was enjoined; opium, brandy, and broth administered, a stimulant enema thrown up, which brought away large quantities of blackish feces, but all to no effect. His delirium increased to such an extent that it was impossible to prevent the grating of the bones on each other; the pupils of his eyes were strongly contracted and insensible to light. His pulse became weaker and weaker until it ceased altogether, and about eight hours after he expired—four days and a half after the accident.

In reviewing this case the following conclusions are

forced upon me. The man died from nervous irritation and loss of blood, which I found had been allowed to flow from him for four or five hours before I saw him. I erred in not immediately amputating the limb. He might have died even then, but still he would have had more chance of recovery.

Case 2.—Feb. 19, 1854. Saw Mr. —, who had just sustained an oblique fracture of the humerus just below the insertion of the deltoid. The muscular contractions of the limb were quite extraordinary, and forbade any attempt to set the fracture until strong extension and counter-extension had been made for some time so as to tire the muscles. As I was obliged to bind on the splints very firmly, I probably pressed the inner splint too high into the axilla; for when, four weeks after, I removed the splints the arm was completely paralysed. Rubbing and rotary movements of the arm, however, in one week overcame the difficulty, and when I last saw him he was lifting a barrel of flour.

Case 3. I was called to see Miss — for a supposed sprain of the upper arm at or just below insertion of deltoid. There were all the indubitable marks of fracture to be found except crepitus. Indeed the bone could be bent almost to a right angle at that point. On inquiry I found that four months before she had fallen, and, as her physician told her, severely injured the arm; the existence of fracture, however, was not suspected. In about three weeks she regained the power of using the arm; but noticed that when she played on the piano-forte her hand would sometimes fly further than she intended. About a month after that she fell down stairs, after which, for a few days, her arm was powerless. She then began to use it again imperfectly. Finally, while on a visit in Brooklyn, N. Y., she fell again, injuring the arm. Two or three days after this she came to Springfield, when I immediately discovered the fracture. The history of the case, and the absence of crepitus, made it evident that the fracture occurred at the first accident, and that there was great danger of a false joint. In order to prevent all motion of the arm I used the "adjuster for fractured clavicle," already spoken of. This held the humerus perfectly motionless throughout its whole length, allowing her to rise up or lie down without the slightest sign of motion at the seat of fracture. Union became quite firm at the end of four weeks. She then returned home. In, I believe, about two and a half months from the time of their application, she threw aside the splints and had full use of the arm. About one year after this, while in Burlington, Vt., she again broke the arm at the same point. She recovered from this slowly; but union finally became firm. I should, in a similar case, I think, adopt the plan of Prof. Hamilton, and dress the arm in the extended position.

FRACTURES OF THE FOREARM.

Besides the fractures of the lower end of the radius, which I will mention hereafter, I have had eight cases of fracture of the forearm. Three only of these were complete fractures of both bones. Five were well marked examples of bent bones; two of which required a good deal of force to straighten. One of the last was a fracture of one bone, and while the union was imperfect the patient received a severe blow upon the same arm, which bent the other bone so much that I was obliged to put the boy under the influence of chloroform and use great force before I could straighten it.

I have treated nine cases of Colles's fracture of lower end of radius. I know of none more apt to be followed by annoyance to the patient, and unmerited blame to the surgeon. The complications that are so apt to occur can, in my experience, be prevented by no human skill. Says Dr. Mott—"Fractures of the radius within two inches of the wrist, when treated by the most eminent surgeons, are of very difficult management so as to avoid all deformity; indeed more or less deformity may occur under the treatment of the most eminent surgeons, and more or less im-

perfection in the motion of the wrist or radius is very apt to follow for a longer or shorter time. Even when the fracture is well cured, an anterior prominence at the wrist, or near it, will sometimes result from swelling of the soft parts." Says another distinguished surgeon—"As the above opinion of Professor Mott coincides with my own observations, both in Europe and in this city, as well as with many of our most distinguished surgical authorities, I venture to hope that it may assist in removing some of the groundless and ill-merited aspersions which are occasionally thrown on the members of our profession by the ignorant or designing." Says Professor Hamilton—"Fifty examples of simple fracture near the lower end of the radius have furnished no cases of non-union, nor indeed do I remember ever to have seen the union delayed; yet only sixteen are positively known to have left no perceptible deformity or stiffness about the joint; it is probable, however, that the number of perfect results might be extended to twenty."

Of the nine cases treated by myself, five at the end of four months were perfectly cured, two of them much earlier, no stiffness or deformity of the remaining four being left; one, occurring in a young lad, where the displacement was very great, was complicated by the formation of matter between the radius and ulna on the palmar surface. This, which I suspect arose from the irritation of the pointed extremity of the upper fragment, which, at the time of the accident, nearly penetrated the skin, retarded the recovery somewhat; but eight months after the injury no impairment of the functions of the limb was observable; the only deformity to be found upon a very careful examination was a *little prominence of the styloid process of the ulna*. The three remaining cases caused me much annoyance and trouble. One of them occurring in a very fleshy person, although uniting without deformity, resulted in great rigidity of the fingers, which required a year's perseverance to overcome. There were also present very severe pain and soreness arising from the stretching of the radio-ulnar and the internal lateral ligaments. But little use was made of splints, and they were early dispensed with, and every effort was made, by steady perseverance in passive motion and by the use of emollients, to remove the stiffness of the fingers. Now, two years since the accident, there is a very little stiffness, and at times a good deal of pain about the internal lateral ligament.

Another case occurring in a feeble woman, was characterized by such great and persistent deformity, that considerable force was required to reduce and keep in place the fragments. She recovered very good use of hand and fingers in about two months. The only deformity was a permanent inclination of the hand to the ulnar side.

Another case, which occurred in Nov. 25, 1856, was the worst of the nine. I was called to it in the evening on account of the absence of the lady's customary medical attendant. The deformity was characteristic, and the existence of a fracture three quarters of an inch from the lower end of the radius extending obliquely downwards and forwards was beyond question. I dressed the limb in the manner recommended by R. W. Smith, of Dublin. Just as I was leaving the house my sanction was asked for the application of arnica. The next day I visited her twice. The day after, thanksgiving day, I visited her in the morning; found everything so comfortable, that she wished to cross the street to visit a neighboring family in the afternoon; gave her permission so to do; raised the upper splint, every thing appeared as it should. The next morning I was called upon very early to visit her, and found the arm badly swollen to the shoulder, and covered by an erysipelatous eruption. I immediately removed all splints and bandages, placed the limb upon a pillow and covered it with cloths wet with solution of morphia. Internally I directed the exhibition of stimulants. There was a doubt in my mind as to whether this inflammation was pure erysipelas arising from constitutional causes, or whether it was not of a specific character, arising from an over use of the arnica. This doubt I stated to the patient and her friends, but no con-

sultation was hinted at. Not dreaming of any blame attaching to myself, and feeling no hesitation as to the proper treatment to be pursued, I continued with the entire responsibility of the case. The erysipelas assumed the phlegmonous form; and small collections of matter formed around the roots of the fingers. A patch of blistered surface upon the back of the forearm required considerable time and patience to heal; but at the end of about seven weeks I ceased attendance after desiring that passive motion of the wrist and fingers should be persevered in. Then, and not till then, I learned that my treatment had been severely criticised, and that the occurrence of the erysipelas, which at first I was at a loss to account for, so suddenly and terribly at its onset, was attributed to tight bandaging. The fingers were stiff from fibrinous effusions into the sheaths of the tendons, and the characteristic deformity, which I had predicted, when I was forced to leave off the bandages and splints, was present, and that was enough. The patient visited Boston and reported upon her return, that some surgeon said that the arm was a crying shame to me, or words to that effect. It is said that, a year or more after my attendance, this same patient, while suffering from the double infliction of a severe sprain of the ankle, and a homoeopathic practitioner, had another attack of erysipelas.

The splints used in this case were broad; the back-curved splint extending from the elbow to the end of the fingers, and the palmar splint extending only to the wrist. They were carefully padded and held in place by a roller bandage outside of everything, so that circular constriction of the arm was simply impossible. Every precept laid down by R. W. Smith, in his work on fractures about the joints, was carefully and scrupulously complied with. They were not tightly applied. I have endeavored to lay before the profession a plain statement of this case, for I consider that it is of more importance to report bad cases than the more fortunate. I need enter into no argument to show how cruel and unjust were the aspersions cast upon me. I prefer to leave the professional reader to draw his own conclusions from the plain statement of the case. I will quote a very similar case from "Hamilton on Fractures:" "Charles Stratton, a healthy and temperate laborer, set. 36, fell forwards from a wagon, Nov. 22, 1854, striking upon the palm of his hand and breaking his radius a little more than one inch above the joint. I found the lower fragment displaced backwards, and it was easily reduced by pressure in the opposite direction. The fore part of the wrist being quite tender to pressure, the splint was applied to the dorsal surface of the forearm; the splint was pistol-shaped, and the surface which was applied to the arm was padded with care; it was secured in its place by a few light turns of a roller, and laid across the body in a sling. The arm was seen by me on each of the succeeding seven days, and on the third, fifth, and seventh days, the splint was removed completely; but on this last day an erysipelatous inflammation had commenced in the neighborhood of the wrist. The splint and roller were, therefore, not re-applied, but the limb was laid upon a broad board, cushioned and covered with oiled silk, and cool water irrigations were directed. The inflammation soon subsided, but the splint was never resumed, as the fragments were found to stay in place perfectly without its aid. At the end of five weeks union seemed to be consummated; and one year later the bone was found to be perfectly straight, yet the wrist-joint and the finger joints remained stiff, so much so that he was unable to perform any labor. The stiffness was, however, gradually disappearing; while all swelling and tenderness had long ceased."

LAUDANUM IN WEAK VISION OF THE AGED.—Professor Nascar, of Naples, says that in case of aged persons whose sight is becoming enfeebled and requires the aid of convex glasses, great advantage is derived, supposing no nervous lesion exists, from painting every evening the eyelids and brow with laudanum, and allowing this to remain on all night.—*Medical Times and Gazette.*

A CASE OF LITHOTOMY IN A COLORED SEAMAN—

INFREQUENCY OF VESICAL CALCULUS AMONG SEAMEN.

BY T. CLARKSON MOFFATT, M.D.,

RESIDENT PHYSICIAN TO THE SEAMAN'S RETREAT, & C.

THE operation of lithotomy has become so common as to deprive it of any very striking or peculiar interest. One of the earliest, it has become also one of the simplest operations which the surgeon is called upon to perform. It has been variously modified since its introduction, and as now generally performed it has been ranked among the safest and most satisfactory operations. The details of the subjoined case are given, not because it is supposed to stand in any respect alone, but chiefly in deference to the opinions and wishes of others who have deemed it worthy of a permanent record, and of some features of interest connected with it that have not come under my notice in the published cases to which my attention has been drawn.

The subject of the operation was a negro, twenty-four years of age, a native of Pennsylvania. He was about five feet in height, well proportioned, and weighed about one hundred and twenty-five lbs. He had followed the sea from a very early age, generally in the capacity of a cook. He obtained admission to the Retreat on the 8th of July, 1857. The expression of his countenance indicated great physical suffering; he walked in a bending position; knees and thighs bowing outward, and with one hand pressing almost constantly upon the hypogastrium, to which locality he referred all his distress. He gave a very intelligible account of his sufferings, which had continued in a more or less aggravated form for about four years;—he had frequently applied to physicians for medical aid, who prescribed for what seemed the most prominent and distressing symptom, viz. great irritability of the bladder. On the day after his arrival a steel sound was introduced, and the presence of a very large calculus clearly made out; the point of the instrument sweeping across it from side to side gave some idea of the magnitude of the contained mass; and the peculiar feel and sound produced, indicated the composition of its exterior structure. The operation for the extraction of the stone was deferred until the 25th, and during the interval a course of preparatory treatment was adopted. This consisted chiefly in the liberal use of mucilaginous drinks, a restricted diet, with an occasional aperient, and hip-baths, which served at times to alleviate the intensity of local suffering. Assistance in performing the operation was ably rendered by the following medical gentlemen, viz. Drs. Isaacs, Robinson, Forshee, and Stiger; there were also present Drs. Anderson, Boardman, Pullen, Wilson, and Hinman. The patient was placed fully under the influence of an anæsthetic, consisting of equal parts of chloroform and sulphuric ether, by Dr. Robinson. The usual lateral incision into the perineum was made, and the bladder entered without difficulty. The finger, introduced through the wound, came immediately in contact with the rough surface of the calculus, which appeared to be about the size of a turkey's egg. It was perfectly evident that the mass could not be removed entire through the opening which had been made. After enlarging the orifice as much as it was deemed safe, its extraction was still found impracticable, and an attempt was then made to break the stone in pieces. On grasping one end of it with a strong pair of forceps but slight force was required to crush the outer covering, which was about three-eighths of an inch in thickness, and this was brought out between the jaws of the instrument. This operation was repeated several times, bringing away with each withdrawal of the instrument a portion of the soft exterior coating, in a pultaceous form. In doing this the jaws of the instrument would sometimes become so deeply embedded in the yielding substance of the mass that I was often obliged to pass my finger through and press it aside. After working in this way for about half an hour, during which

three pairs of forceps were successively bent or broken, I succeeded in reducing the size of the calculus, so that with a pretty strong pull it came away. It was found, on inspection, to be threefold in its structure, consisting of a nucleus, very hard, and of a greyish white color, composed of urate of ammonia, then a layer of the dark oxalate of lime, and, lastly, the jagged outer covering of the phosphate of ammonia and magnesia.

The bladder was then thoroughly washed out with a syringe, and the patient placed in the usual posture in bed. He remained unconscious throughout the operation, and awoke a few minutes afterwards perfectly relieved of the hypogastric distress from which he had suffered for so many years. But little constitutional excitement followed the operation, and this of short duration. He slept and ate from the date of the operation in the most natural manner. The urine began to follow the accustomed channel on the sixth day. After the twelfth day he sat up the most of the time. From the third day the edges of the wound were covered with a white sandy crust, and some of the same substance appeared in the urine, for which alkaline demulcent drinks were freely administered. On the twenty-second day after the operation the patient complained of great pain in the hypogastrium, and inability to void his urine. On examining the wound, it was found plugged with a mass of white, stringy mucus, mixed with sand, on removing which the urine escaped with great force; a small quantity of the same substance was removed from the meatus, and on feeling along the course of the urethra, it was found to be distended for about two inches, with a hard substance so impacted that it could not be moved with the finger. Chloroform was given him, and small-bladed forceps were carried down until their points came in contact with the mass, and were made to grasp it, when with slight traction it was removed. It was very hard, perfectly cylindrical, and about two and a half inches in length, consisting of very small particles of phosphatic deposits, mixed with mucus; after this the urine flowed without obstruction, and the patient was entirely relieved. I have had the pleasure of seeing the patient several times since he left the Retreat, in perfect health, without a trace of his original trouble. I have been unable to find in the records of the Seaman's Retreat, embracing a period of twenty-eight years, during which 46,036 seamen have been treated in the institution, any other case of calculus, a fact which corroborates the generally received opinion that the disease is comparatively very rare among seamen. The fact that negroes are peculiarly exempt from these troubles adds another feature of interest to the case above detailed.

SEAMAN'S RETREAT, July 34th, 1890.

DUTIES OF PHYSICIANS TO MEDICAL SOCIETIES.—The *Cincinnati Lancet and Observer* contains the following just strictures: "It is to be lamented, that so small a number of the three thousand physicians of the State can be induced to attend the meetings of the Society. This should not be. We know some men who persistently ridicule, not only the State Society, but also the local societies in their neighborhood. There are some people in the world who, if they cannot have a society of which they may be members adopt their ideas or course of policy, withdraw in great disgust, and abuse it. The fact is, and it may be stated in plain terms, that the day of attending to your own business, letting medical societies alone, and confining oneself to his little practice, is about over. Every man who absents himself from medical societies is, as a general rule, either a poor practitioner, a man who practises his profession as a trade, or a charlatan. The only way to elevate our profession is for each and every member to manifest interest in it, and in everything which concerns it. The persons, then, who absent themselves from societies may be said to be unworthy of general professional regard, for they neither do anything for the general good, nor applaud by their presence those who desire to do something."

Reports of Hospitals.

NEW YORK HOSPITAL.

DISLOCATION BACKWARDS OF THE FIRST PHALANX OF THE THUMB.—REDUCTION.

[Reported by ROBERT F. WHITE, M.D., Resident Surgeon.]

A LAD aged 15 years, was admitted March 9th, 1860, having produced the above injury twenty-four hours previously, by accidentally striking the bulb of his left thumb against a board. He was seen by a physician shortly after the reception of the injury, who etherized the patient, and made several unsuccessful attempts to reduce the luxation by extension and counter-extension, by means of a "clove hitch," &c. A second trial was resorted to the following morning with a similar result. On admission, the integument of the distal phalanx was found stripped off, its bulb much contused, and the radial portion of the hand considerably swollen. On examination the distal portion of the first metacarpal bone was felt in the palm, in the first metacarpal space, with a corresponding projection posteriorly caused by the proximal end of the phalanx, which formed an obtuse angle with the metacarpal bone, the first phalangeal joint not being at all flexed. Patient was again put under the influence of the anæsthetic, and extension made with Malgaigne's forceps both in the axis of the thumb and also at right angles anteriorly and posteriorly without effect. forcible dorsal flexion was then resorted to, and the phalanx crowded towards its proper place, pressure also being made on the displaced head of the metacarpal bone. By this means, and then flexing the thumb strongly, reduction was, after two or three attempts, effected; though by bending the phalanx backwards the dislocation could be readily reproduced, but not by the patient. A considerable amount of swelling ensued, which, however, subsided in a few days, and on the 16th inst. he was discharged from the hospital, the motion of the joint being fully restored.

FIBRO-PLASTIC TUMOR IN THE CHEST.

[Reported by S. S. HARRIS, M.D., Resident Physician.]

Rosalie M—, æt. 35, a native of Germany, and married, was admitted April 11th, 1860. Five months before patient was attacked, after exposure to wet and cold, with acute rheumatism, which affected most of the large joints, and for want of proper treatment continued, with occasional intervals of relief, for about three months. A new set of symptoms then appeared, consisting of a severe pain beneath the sternum and also in the cardiac region, dyspnoea, cough without expectoration, and some oedema of lower extremities. Previous to the attack of rheumatism, her health had always been good. No hereditary predisposition existed. At the time she first came under observation she was suffering greatly from dyspnoea, which amounted almost to orthopnoea, and could obtain ease only in the sitting posture; respirations 40 per minute; pulse 100, and weak; some cough, but no expectoration; appetite poor; bowels costive; urine normal; lower extremities very oedematous. The physical signs were: anteriorly, complete dulness over the whole of the chest, and no respiratory murmur except over a small space beneath the clavicles; the heart sounds were distant, but no bruit could be detected. Posteriorly, respiration could be heard all over the chest, and was somewhat bronchial. The patient lingered until the 23d of April, twelve days after admission, when she died in a paroxysm of dyspnoea. Before her death she complained of severe pain in her chest, and had frequent and urgent attacks of dyspnoea. The autopsy was made twelve hours after death; a large tumor weighing seven lbs. was found occupying the anterior and lower portion of the chest, about two-thirds of it being to the left of the

median line, and completely enveloping the heart. It was connected with the pericardium, pleura, and larger vessels of the chest, but its main attachment seemed to be to the pericardium. On removal, the mass was flattened and circular in form, presenting a greyish appearance, with several blotches, apparently of extravasated blood, which were raised above the surrounding parts, giving the tumor a nodulated appearance. Interiorly, the tumor looked like medullary substance, interspersed with fibrous tissue. The mass had no connexion with the bony walls of the chest, and no bone-tissue was discovered in its substance. Dr. W. H. Draper made a microscopical examination and found all the appearances present which were peculiar to fibro-plastic tumors.

PENNSYLVANIA HOSPITAL.

[Service of Dr. LEVICK.]

Chorea in Pregnancy.—**MRS.** —, æt. 16, had previously been afflicted with chorea at the age of 12. Now, being about four months pregnant, she had been again attacked, and there is no doubt that the affliction depended upon the condition of the womb. This form is exceedingly rare, Prof. C. D. Meigs having seen but three cases in a very extensive practice. Dr. Levick had, in hospital practice, met with two other cases, both in this institution. She has been treated by enemata of tr. opii at night, to relieve the great restlessness, and procure sleep. Her general condition has also been improved by the free administration of the subcarbonate of iron. When such a case occurs in a pregnant female, it becomes a question whether abortion should not be induced in order to stop the progress of the disease, as from the intense excitement, the inability to sleep, etc., fears are sometimes entertained of a serious result. In none of these cases has Dr. L. detected albuminuria, though by some it is regarded as the superinducing cause of the affection.

Bronchitis.—This patient complained of great pain in the side, with difficulty of breathing. She has a free, frothy expectoration, sputa streaked with blood. By auscultation mucous râles are detected. She has been taking a mixture composed of ammon. carb. gr. iij, syr. senegæ f3 ss, gum. sacch. alb. q. s., every two or three hours, according to circumstances. If sickness at the stomach is produced, omit the senega. This combination has been found of much value in bronchitis, and especially in typhoid pneumonia. A certain amount of effusion has taken place, and as she is quite weak, she will be put on wine whey, and stupes of turpentine be applied to the back.

Rheumatism.—In this disease, experiments have recently been made to test the value of the *propylamin*, or extract of fish pickle. It has, in some cases, acted well, though on the whole it has disappointed the physicians who have tried it. The acetate of potassa is now much used, and has been found to answer the indications excellently. Dr. L. is very partial to a combination similar to the Dover's powder. R. Pulv. opii, Pulv. ipecac. 33 gr. ss, potas. acetat. gr. v., given every three or four hours. He exhibited several patients who had been thus treated, and one who, in addition, had been taking Scudamore's mixture; all were improving rapidly. In one case of acute rheumatism, a subcutaneous injection had been made of Magendie's solution of the sulphate of morphia. The strength of this is sixteen grains to the ounce of water. Of this, xv. minims were injected daily, and with the happiest results.

Catarrhal Ophthalmia.—This patient had been in the house previously for the gonorrhœal form, and now presents himself with that resulting from catarrh. He has had iritis, and being of a strumous diathesis, this was much aggravated. In these forms of affection of the eyes, much benefit has been derived from the employment of the oleum terebinthinæ 3 ss, three times a day. Slight salivation having been produced by the use of mercurials, he is also

using a gargle, which has been found of great benefit in the house practice. It consists of spt. vini gallici f3j, tinct. cardam. comp. f3jss, aquæ f3ij.

Malarial Disease.—A case of intermittent was next presented. This man had an enlarged spleen, and was evidently suffering under leucocythemia. He presented no other symptoms of the *morbus Addisoni* which would have been suspected from his general appearance, and Dr. L. did not believe there was any disease of the *capsule renales*. The treatment in this case has been the employment of quinia and iron. The most convenient way of giving these remedies is by dissolving the sulphate of quinia gr. i. in tr. ferri chloridi gtt. xv., which dose is given four or five times a day.

NURSERY AND CHILD'S HOSPITAL.

COLITIS—CEREBRAL EFFUSION.

[Under the Care of Dr. ROBERT WATTS.]

Cases like the following are not of infrequent occurrence in private practice. Dysentery, complicated by cerebral symptoms, is one of the most dangerous and uncertain diseases of infancy, and one which requires great care and prudence on the part of the physician. A large proportion of severe cases of colitis in the infant is attended from the first with determination of blood to the brain, and the anterior fontanelle, if not closed, is seen to be prominent and forcibly pulsating. If the case is protracted, the congestion abates in a few days, but a new condition is liable to occur, that of serous effusion. Death often takes place from the congestion or effusion, when, if the case were one of simple colitis, the infant would probably recover. The patient whose history is narrated below had no cerebral symptoms till within five days of his death, when they were produced as afterwards appeared by effusion, and as often occurs in this disease, active treatment for the primary complaint was contra-indicated by the condition of the brain. The state of the lung was one of some interest. In nearly all cases, in this Institution, of death from protracted disease, there is hypostatic congestion of this organ, and often the part most dependent is in the condition observed in this instance. This part is dark red, non-crepitant, and sometimes allowing only partial inflation. This is no doubt the pneumonia of Billard and others, who consider position the chief cause of inflammation of the lungs in infancy. The pathological state appears, however, to be rather that of splenization described by Dr. Swett as occurring in continued fever.

I. G. was admitted into the Nursery on the 19th of last May, at the age of thirteen months. At the time of admission he was plump and healthy, and the fontanelles were closed. On the 1st of June he began to have green, watery passages, for which he took various prescriptions, containing for the most part, kino, Dover's powder, rhubarb, and hyd. c. cret. in small doses. On the 4th of June the symptoms became much aggravated, the stools frequent and bloody, and the pulse numbered one hundred and forty. On the 5th no blood was observed, his aspect was cadaverous, and he was evidently sinking. The Geranine mixture (a) was ordered, followed by temporary improvement. From this date till the 27th, there were various alternations, but there was commonly more or less blood in the passages. On the 27th a new class of symptoms was observed, the abdominal complaint continuing; he held his head back, rolled it from side to side, and occasionally uttered a shrill sharp cry. On the 29th his pupils were dilated, his pulse weak and irregular, he grated his teeth, and frequently uttered the same sharp shrill cry. He was ordered potas. iod. gr. i., to be given hourly, and McMunn's elixir gtt. i., to be given according to the state of the bowels. Constipation now succeeded; the extremities became cold; pulse scarcely perceptible, and on the 2d of July, he expired quietly. There were no convulsions during any part of his sickness.

Autopsy, twenty-four hours after death.—The occipito-frontal circumference of the head eighteen inches; distance over the vertex from one auditory meatus to the other, twelve inches; on removing the calvarium about four ounces of serum escaped from the ventricles and base of the brain; substance of the brain of usual consistence and appearance, with the exception of slight congestion; there was no thickening or opacity of the membranes, and no fibrinous deposit; lungs healthy and readily inflated, with the exception of a small portion not more than an inch in length by a third of an inch in breadth, situated in the posterior surface of the lower lobe on each side; these parts, which could not be inflated, were of a dark red color, and non-crepitant; no pleuritic adhesions, and little or no serum in the pleural cavities; foramen ovale and ductus arteriosus closed; liver of a yellow hue, weighing six ounces; mucous membrane of the stomach of a brownish tinge, but not vascular, thickened, or softened; mucous membrane of the jejunum and ileum healthy; mucous membrane of the colon thickened, and more or less vascular through its entire extent; there were many ulcers in all parts of the colon, several of them from an eighth to a quarter of an inch in diameter; the edges were raised and vascular, and in some of them were points of clotted blood; mesenteric glands considerably enlarged; the other viscera had a healthy appearance.

Microscopical Examination.—The dark red non-crepitant portions of the lungs, contained, besides the blood discs, the pavement epithelial cells, with very few imperfect exudation corpuscles; there were also a few small granular cells; the hepatic cells were quite fatty; there were many free oil globules in the field of vision; the bottom of one of the deepest ulcers was also examined, six hours after the autopsy, when vibriones were found and the muscular fibre was exposed.

BELLEVUE HOSPITAL.

TREATMENT OF HIP-JOINT DISEASE BY APPARATUS.

In the first number of the *Medical Times* the report of St. Luke's Hospital contained the details of a method of treating morbus coxarius by extension and counter-extension, by an apparatus which allowed the patient to take proper exercise. This treatment has proved so advantageous, both in the immediate relief which it affords to the sufferings of the patient, and the permanent recovery of the diseased joint, that we deem it our duty to call the attention of the profession to it on every proper occasion. The principles which guide the surgeon in the application of extending and counter-extending apparatus in incipient hip-joint disease are the same as would lead him to place an inflamed part at rest, and remove it from every source of irritation. The joint surface being inflamed, the parts become acutely sensitive, and the first effort of the patient is to place the limb in a position best adapted to secure perfect rest. This is, indeed, attempted on the part of Nature, without even the will of the patient, by the firm contraction of the muscles of the thigh, which hold the limb in a fixed position. Although the patient may keep the limb in a quiescent state, and thus obtain a temporary freedom from pain, two important elements in the treatment are not secured, viz. the separation of the apposed joint surfaces and the ability to exercise, and thus maintain the general health. Instead of meeting the first indication, the very effort of the muscles to fix the limb tends strongly to press these surfaces together, and while freedom from acute pain is experienced by the sufferer, the conditions for a continuance of the inflammatory process still exist. To place a joint therefore in the best possible condition to insure a subsidence of the inflammation, we must permanently separate the apposed inflamed surfaces, and still enable the patient to take that amount of exercise necessary to maintain the

general health. A simple straight splint applied, as for fracture of the thigh, will, by extension and counter-extension, accomplish the first object. The relief that even this dressing gives, by the separation of the inflamed parts, is very striking. But it is now proved that an apparatus may be applied that will not only afford the requisite amount of extension and counter-extension, but which meets also the second indication in allowing the patient to exercise freely. This apparatus was described in the report referred to above.

A few days since Dr. Sayre brought two patients before the class attending the practice of this hospital, suffering from morbus coxarius, but in different stages. The first was a boy of eight or nine years of age, who had been treated with blisters and issues in the first stage of the disease, but without any good results. About nine months ago the treatment was entirely changed; the apparatus alluded to was applied, and the patient allowed to resume his outdoor sports. The relief was immediate and decided, the pain disappeared, and the general health of the little sufferer was gradually restored. With the splint applied he now walks and runs with ease, flexes the limb upon the trunk without pain, and from morning to night has scarcely a symptom to remind him of the disease from which he is rapidly recovering.

EXSECTION OF THE HEAD OF THE FEMUR.

The second case illustrated the evils which follow delay in the treatment of hip-joint disease. The patient was a boy, aged about four years, in whom the disease had progressed to the formation of an immense abscess on the lateral aspect of the left hip. The operation was undertaken with reference, first, to the evacuation of this collection of matter; and, secondly, exsection of the head of femur, should it appear that the disease had advanced to the ulcerative stage. The patient was placed under the influence of chloroform, and a free incision made into the abscess. A large quantity of matter was suddenly evacuated, mixed with a curdy substance, revealing the cavity of a large abscess, with dark, sloughy walls. The finger passed around the joint detected an opening in the superior part, which seemed to lead to its cavity. Rotation of the limb, however, did not give crepitus until pressure was applied very firmly, both to the thigh and pelvis, when it became very perceptible. The operation was at once proceeded with, and on turning out the head from its socket it was found to have nearly disappeared. The remaining portion, with the trochanter major, was removed. The acetabulum was slightly carious, and the dead portions were separated with the gouge. The limb was dressed with Dr. Bauer's wire breeches, which answered admirably.

COATES ON APOTHECARIES.—Dr. Coates, in his Address before the Philadelphia County Medical Society, makes the following allusions to the apothecaries of that city:

"If Jeshurun be representative of our apothecaries, he has certainly, in some instances, waxed fat and kicked. Occupying, first, the wholesale drug business, he has also largely partaken of the sale of toilet and fancy articles. In other cases, it may be, he tends a little to emaciation. The result is, as far as stands conspicuous to the public eye, the appearance of multitudinous establishments throughout the city, an army of young men, a college, with its officers and appurtenances, the accumulation of large fortunes, and an active share in the administration of diversified public institutions: whilst Jeshurun retains the title of an apothecary, and more or less prepares and supplies drugs. Is the scientific and life and death parts of an apothecary's labors a thing so slight and limited as to require the occupation of so small a portion of human existence, and to leave leisure for all these glories? Or has their profession embraced all the genius of the city?"

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American Medical Times.

SATURDAY, AUGUST 4, 1860.

THE SALE OF POISONS.

We last week noticed the action of the Academy of Medicine with reference to the enforcement of the new law of this State, passed by the last Legislature, regulating the sale of poisons. As this act has never been published in our columns, and as its provisions apply equally to the other cities, as well as large towns of the State, we insert it at length, in order to give it as wide a publicity as possible. It is as follows.—

The people of the State of New York, represented in Senate and Assembly, do enact as follows:—

SEC. 1. No person shall sell or give any poison or poisonous substance, without recording in a book, to be kept for that purpose, the name of the person receiving said poison, and his or her residence, together with the name and residence of some person as witness to such sale, excepting upon the written order or prescription of some regularly authorized practising physician, whose name must be attached to such order. Such book shall be kept open for inspection.

SEC. 2. No person shall sell, give, or dispose of, any poison or poisonous substance, except upon the order or prescription of a regularly authorized practising physician, without attaching to the vial, box, or parcel, containing such poisonous substance, a label, with the name and residence of such person; and the word "poison," printed upon it with red ink, together with the name of such poison written or printed thereon in plain and legible characters.

SEC. 3. These provisions shall apply to the following poisonous substances, excepting when sold in wholesale quantities of one pound and over, viz. arsenic and its various preparations; oxalic acid; corrosive sublimate; chloroform; sugar of lead; tartar emetic; opium and its preparations; oil of bitter almonds; cyanurets of potassium, mercury, silver, and zinc; deadly nightshade; henbane; poison hemlock; prussic acid; aconite and its various preparations; atropa and its salts; cantharides; croton oil; datura and its salts; digitalis and its preparations; nux vomica and its preparations; elaterium; ergot and its preparations; veratria and its salts; cannabis indica and its preparations.

SEC. 4. Any person infringing any of the provisions of this act, shall, upon conviction, be deemed guilty of a misdemeanor, and shall be punished by a fine not exceeding fifty dollars.

SEC. 5. This act shall only apply to incorporated cities, and villages having a population of one thousand inhabitants.

Of the origin of this law, and the means by which its enactment was secured, we have no knowledge; we are only surprised that a measure of this kind, designed to regulate the trade of a certain class of shopkeepers, ever passed the corrupt and venal body which disgraced our legislative halls last winter. Let us be thankful that this law, for which other countries and States have had to contend for years against the powerful opposition of druggists and pharmaceutical associations, has quietly taken its place upon the statute book, and now only awaits the application of the District Attorney to correct one of the most dangerous abuses of trade known in civilized communities.

But the question of prime importance is:—Shall this law be carried out, or shall it remain inoperative, a dead letter upon our statute book? That the better class of druggists throughout the State will carry out its provisions strictly, we have no doubt, for they have already a rule among themselves, adopted by the Pharmaceutical Association at its session in 1857, which is sufficiently stringent. The chief opposition will arise from that class of druggists who follow their business as a simple trade, reckless alike of personal character and the public good.

The duty of the medical profession in reference to the enforcement of this law seems to us plain. Every measure relating to the improvement of the public health ought to be vitally interesting to the physician, and should not only enlist his sympathies but his earnest efforts in its behalf. Now, no law has been passed in this State in many years which aims to accomplish more for the public safety than the one under consideration. We deem it therefore the plain duty of medical men throughout the State to aid, by every means in their power, its enforcement.

HEALTH—EXERCISE—EDUCATION.

PHYSICAL EDUCATION, and health both of the body and the mind, are subjects not only of popular interest, but as strictly medical questions they are assuming decided prominence; and unless medical men keep in view the paramount importance of practical hygiene, and make themselves familiar with its principles and details, they will soon find themselves subject to the charge of ignorance and indifference, in a matter which in reality is one of the first, instead of the last, to which they should give heed.

The science of public hygiene, including those subjects which are embraced by the term "State Medicine," has latterly occupied the attention not only of the people of this and other countries, as evinced by the voluntary conventions and associations which have recently attracted so much notice on both sides the Atlantic; but several of the most enlightened governments of Europe, and some of our own land, have shown their appreciation of its importance by instituting commissions for the investigation of its various departments, while their statutes are made to bear already the practical fruits of such judicious inquiries.

The point to which we would particularly direct attention in this article is, that while these investigations and improvements are, in some instance, the results of professional suggestion and labor, in many others they are accredited to laymen, sometimes, but not always, in conjunction with medical coadjutors and advisers. We allude

to this fact not, of course, in disparagement of non-professional benevolence, intelligence, and public spirit, but merely as a hint to our professional brethren to beware lest the palm be removed from the brows upon which it should *first and most firmly* rest.

That the study of the public sources of disease, and the means of their prevention, is a duty which the profession owe to the people, is our firm belief; and it is doubtless the neglect of this duty which has aroused the benevolent and public-spirited of various lands, to assume to lead in a work in which they should have been followers, or at least co-laborers, only.

But this sin of omission, we regret to be obliged to say, is not confined to the *public* branch of the subject, but we fear is chargeable upon the profession, to too great an extent, in that other branch which is solely their province, in which their duties and responsibilities cannot be shared by governments, conventions, or associations. We refer, of course, to the supervision and direction of the private and personal hygiene of the individuals and families whose "sanitary condition" is intrusted to their skilled advice. From all sides, and the remotest corners of the land, the cry is coming up to us of the physical degeneracy of the Anglo-Saxon race; of the vast increase of nervous and other general or constitutional disorders—especially of females—the future mothers of the people, produced, no doubt in part, if not chiefly, by more effeminate modes of life, diminution of bodily exercise, indoor confinement, more luxurious tables, and perhaps by more than all other combined, the vicious system of school education now almost universal. Can we hold ourselves entirely irresponsible for the continuance and increase of these evils, when we raise no voice of warning against them? But further still. Are we not chargeable with too great neglect of the laws of hygiene in the treatment of the individual maladies which come under our immediate and daily care? Is not the case of Catharine E. Beecher, as related by herself,* in this respect, a type of medical practice far too prevalent? Educated, as she tells us, up to the age of twenty, in obedience to all the laws of health, "not from principle but from poverty," she found herself at that age unable to recall the memory of a single day of sickness, and in the enjoyment of the physical and mental pleasures that are the attendants of *perfect health*. The cares and duties incident to self-support, the responsibilities and sorrows of life, soon reversed this happy physical condition, and during her second score of years she was a victim of maladies which brought her under almost continual medical treatment—and what were her reflections in the retrospect? "During that whole period I was constantly under the care of the most celebrated regular physicians of Connecticut, Massachusetts, or Ohio. Yet not one of them even inquired in regard to the ventilation of my sitting or sleeping rooms, nor the amount of exercise taken, nor the nature of my food, nor directed the bathing of the skin, nor told me to save my weak limb from any excess of exercise. The history of my medical experience under talented, highly-educated, and celebrated physicians, is worthy of attention and reflection." In this last remark we perfectly agree with the lady, and are convinced that the general neglect of these first essentials of health in the treatment of diseases is one of the most potent causes of

the abandonment of scientific medical practice for the dogmas of Priessnitz, Hahnemann, Thompson, and the rest of the numerous tribe of irregulars, who so well know our failing in this respect, and hence profit by it. With a pharmacopoeia unsurpassed for scientific perfection of detail and efficiency of action, and with a pathology which is a marvel to ourselves, let us not forget that nature has also a dispensatory from which we may draw *ad libitum*, and never too freely, but whose neglect not only diminishes our success and credit, but the health of our patients also.

We have been led to these reflections partly by the perusal of the following highly interesting private letter, with which we have been favored, by a friend in this city, and which we present to our readers, not as evidence of what has been accomplished by one of Great Britain's most intelligent and industrious sanitarians, Edwin Chadwick, Esq., but as suggestive to medical men of the great amount of work which yet remains to be accomplished.

Richmond, Surrey, S. W. (England), June 11, 1880.

MY DEAR MR. B.—

I have of late been prosecuting an educational inquiry which promises large results. You may know that I was a Commissioner of Inquiry into the complaints as to the successive labor of young persons in our cotton manufactories, and that I proposed measures which in part have been executed, for reducing the working time of children, under thirteen, to six hours daily work, and for insuring a daily attendance at school of three hours. The children under this provision are called "half-timers." On an investigation of the results of the instruction obtained by these "half-timers" in well-conducted schools, I find that their attainments are quite equal to those of the full-timers, or those attending school six hours daily, and that in mental aptitudes for the application of their knowledge they are superior. They gain in bodily condition, by the reduction of their bodily labor, as they do in mental condition by the reduction of their mental labor of the common routine of school teaching. On the other hand, I have carried out a close examination of the best of our long-time schools for young children, and I find upon the testimony of the most intelligent teachers, that by no means can they keep up a voluntary attention beyond two hours in the morning and one hour after dinner, or in the afternoon; that by force they cannot get more than an entire half-hour of real attention, and indeed that that extra half-hour is a mental mischief, and begins to be a bodily injury.

It follows that the whole of our school system is in violation of psychology and physiology,

Boys retrieve somewhat the injury of undue mental work by athletic games, not so with our girls. In our boarding schools they are kept at sedentary occupation often as long as eight hours, with but slight bodily exercise. I find that in Manchester the females, daughters of mothers who have worked hard, but whose fathers have got on in the world, and who do not need the manual labor of their children, and who have sent their daughters to day schools and to boarding schools, that these daughters are shorter and generally of inferior strength, to the working mothers; that the proportion of mothers of the well-to-do classes there, who can suckle their own children, is diminishing; that among women who have one servant there are ailments which are unknown amongst women who have no servants; that these ailments are worse with women who have two servants, and yet very bad indeed, and with new complications of hypochondria, amongst women who have three servants. A Manchester physician, who got thoroughly tired of attending upon one of those ladies, said at last that his only hope for her cure was in one simple prescription, "to live upon sixpence a day and earn it." The evil is, however, that their school training has been such as really to disqualify them from earning it. One evil

* Letters to the People on Health and Happiness.

is that the deaths from childbirths are sevenfold greater amongst the females of the higher class than amongst the class with one or no servant.

Now what I have long heard is, that the Anglo-Saxon race in America is degenerating; that the proportion of females there who can rear their own children is diminishing; that young American ladies fall off sooner than the old country; that the bones of the race, as I see one lecturer states, are altering, and the teeth overcrowded. But might I not as well say, that the Anglo Saxon race is falling off in Manchester; that the females decay sooner than they did, or do, in the very "old country" on the hills a few miles off, where they have to milk cows and carry milk pails on their heads, and where there are no spinal distortions such as are common in well-to-do families. As to the alteration of the bones, and the overcrowding of the teeth, cited as a proof of the alteration of the race, a very able American dentist here, Mr. B***, tells me that it is simply due to the insatiable habits of the parents.

The remedies to which I go, are the reduction of the ordinary school hours by one-half, and the occupation of children who are not engaged in manual labor with gymnastics. I have started, in conjunction with Lord E***, a school drill association for boys which goes on promisingly, but for girls the work remains to be done. In Sweden they have introduced gymnastics in connexion with female schools, but they have not reduced the excess of school occupation. A Ladies' Sanitary Association, headed by the Lady C***, Mrs. C***, and a number of other great ladies, have required that I shall give a public lecture on the subject to their Association, on the 18th of next month.

I remember an American medical tract on the evils of the over excitement of the nervous system of females, of some thirty years ago. I should be obliged if from any of your medical friends, Dr. Griscom or others, if the evils in question have been observed, or treated in connexion with education in any recent medical or educational works, you will send me word, or the tracts in time for my use of them. I supplied information on sanitary topics to the late Mr. Horace Mann, who returned me several interesting educational reports from Massachusetts; but I have got none of recent date. I observe in connexion with education a "truant officer" mentioned as a public officer. I should be interested to know the nature and extent of his functions, and whether they are connected or not with long-time school-hours, or how? With our "half-timers" the voluntary attention is bright, and the floggings for inattention, and the truants, fewer.

For girls I propose more industrial training, for the poorer class, laundry work, washing, ironing, etc.

* * * * *

I have been so far impressed with the evils of over-sedentary application, and the usual course of our schools, that I have retained my son at home at some inconvenience, and reduced his book application, and increased his bodily exercise as much as I could, having him taught the horse and foot drill with good effect. I shall hesitate before sending a daughter to any boarding-school.

Yours, etc.,

EDWIN CHADWICK.

THE NATIONAL SANITARY CONVENTION.

THE Fourth Annual Session of the National Sanitary and Quarantine Convention, recently held in Boston, appears to have perpetuated the interest, and carried out the purposes and spirit of the previous meeting, held in New York last year. Called into existence by the urgent necessities of the public health and the demands of commerce—at first with special reference to particular improvements and compromises affecting quarantine regulations—the whole subject of hygiene and medical polity, it has been found, must be

considered in connexion with the original work undertaken by the earlier meetings of the convention; and after a full survey of the field it has been unanimously conceded that the best sanitary defences consist in sanitary works. Domestic and Civic Hygiene has finally become the grand theme of inquiry and discussion. And so various, unsettled, and practically important, are the questions relating to specific plans for sanitary improvement and protection in our American cities that it has been deemed expedient to perpetuate the labors and the influences which have so successfully been called forth by these annual conventions. It is proposed that a permanent organization shall be instituted under the title of The National Sanitary Association of the United States.

Doubtless the Committee on Permanent Organization will carefully consider the grounds upon which the proposed association should be based; but we would respectfully venture the suggestion that such plans should be adopted as will most certainly insure the hearty co-operation of non-medical gentlemen and municipal officers in the objects and labors of the association. Their practical and common-sense views, and their cordial support of sanitary measures that may be proposed by physicians and other scientific men, are really essential to the successful prosecution of sanitary improvements in the city or the state. The presence, and the eloquent, statesman-like support of such distinguished men as Everett, Banks, Lincoln, and Quincy, at the Boston meeting; the earnest, inquisitive, and thorough efficiency of a Vié, a Snelling, an Elliott, and a Halladay—sitting in council with the Bigelows, the La Roches, an Arnold, a Griscom, and the venerable and learned Alexander H. Stevens, of the medical profession; together with the affluence of courteous and friendly attentions which so distinguished the recent convocation in Boston, plainly indicate the wisdom of perpetuating such united counsels and labors of all classes of public-spirited and philanthropic men in common efforts for sanitary reform.

Great undertakings have been projected for the ensuing year, and if one half the committees should present suitably prepared reports at the meeting in Cincinnati, that meeting would mark an epoch in the history of sanitary improvements and human progress in our country. It is very desirable that the report on food, markets, and abattoirs; also that proposed by Mr. Snelling on hours of labor and study, together with those on tenements, drainage, topographical maps for cities, and Medical Polity or "State Medicine," should be presented at the next annual meeting. They will embrace topics which are intimately connected with much needed reforms.

THE WEEK.

THE EPIDEMIOLOGICAL RECORD, which is commenced with this number of the *MEDICAL TIMES*, is designed to be a permanent feature of our journal, and we beg leave to invite the special attention of our readers and correspondents to the fulfilment of this design, as announced in the first number of this paper. Believing that most valuable results will yet be attained by such voluntary registration of prevalent diseases—particularly those of a zymotic character—we shall always be grateful to our professional brethren, whether at home, in their own practice, or travelling in regions where

this journal may have no other correspondents, if they will accurately and concisely record and transmit to us such facts as we desire to present in this department.

It is desirable that reliable records should be made of all epidemic and endemic maladies, particularly of typhus, typhoid, and exanthematous fevers; also of diphtheria, rheumatic and cerebro-spinal meningitis, together with malarious diseases. And in order to render such records practically valuable for purposes of subsequent study or reference, as well as for present instruction and interest to our readers, it is highly desirable that the leading climatic phenomena and meteorological observations be recorded in connexion with the history of every zymotic disease. Especially would we invite accurate statements regarding the prevalent winds, hyetal and hygrometric records, and barometric variations; and, when possible, it is desirable to know the results of electrical and ozonomic observations where any fatal epidemic is prevailing. Yet we shall always be grateful for the simplest statistical and chronological records of prevalent diseases, and in our epidemiological record we shall register all maladies that are unusually prevalent, regarding the term epidemiological as sufficiently generic for the purpose, whether the records relate to diseases that are strictly epidemic, endemic, infectious, or contagious.

THE MAISONS DE SANTÉ of the French capital, of which there are scores, are among the most important appointments of that city for the comfort and proper treatment of the sick. They are private hospitals, accommodating only a limited number of patients, but having the comforts, conveniences, and isolation of the best class boarding-houses, with experienced nurses, and all the appliances of a well regulated hospital. Such an institution is in operation in this city, called the Sanitary Home, directed by Dr. HENRY SCHWEIG. It is situated in a pleasant but central part of the city, and the building is new, and furnished with all the "modern improvements." Physicians directing their patients to this establishment can attend them personally, and as exclusively as in a private boarding-house. We recommend the Sanitary Home to the attention of the profession.

Among the almost daily report of suicides we notice one by taking arsenic; the victim was a German woman, residing in Hoboken, who had but recently come to this country. The first fruits of our free institutions have proved bitter indeed. The jury "call the attention to the public authorities to the loose manner in which poisons are sold by druggists generally."

An instance of transporting persons kept at public expense is reported. Three persons, an old man and woman and a young woman, were arrested by the police of this city as vagrants. The old man, the most rational of the trio, stated that they had been inmates of the Insane Asylum at Taunton, Mass.; and that they were placed on the cars and sent to New York the day before. On arriving here they were taken to Castle Garden, and being refused admittance were taken to the station-house. We believe this is not the first time that Massachusetts has expatriated her vagrants, and that New York has been taxed for their support. It is a novel method of treating the insane, and one not likely to improve their condition.

Reviews.

ÉTUDE DE LA STÉRILITÉ CHEZ LA FEMME. Par le Docteur PH. HUTIN. Paris. G. Baillière. 1889. 8vo. pp. 116.

DR. HUTIN's work comprises in its preliminary remarks a synopsis of those general circumstances which have an influence upon the act of generation, such as age, constitution, organic disposition, consanguinity, climate, races, alimentation, emigration, influence of seasons, and social condition. Among the special causes of sterility in woman, the author mentions, first, the imperforation of the hymen. The closure of this membrane may be absolute or imperfect; in the former instance it gives rise to the well known symptoms of retention of the menstrual blood, while a partial obstruction makes itself known by the obstacle it offers to a free consummation of sexual intercourse. In both instances a crucial incision into the hymen, and the introduction of an oiled pledget of lint into the opening thus made, is the procedure required under those circumstances. The congenital narrowness of the vagina, another source of sterility, may present itself in different degrees. Three cases are reported of constriction of the vagina, which were successfully overcome by the use of sponge-tents. Besides this congenital malformation, the capacity of the vagina may be lessened by circular or band-like membranes, which only need to be incised and mechanically dilated. They sometimes are remnants from intra-uterine life, sometimes the consequence of inflammation and cicatrization. In some few instances sterility seemed to be the result of a disproportion in the length of the sexual organs. Where the vagina is too long, as it happens in very fat women, the womb may be brought lower down by the use of a hypogastric bandage during connexion. If, on the contrary, the vagina is too short, so that the penis passes by the side of the vaginal neck, the husband must be instructed by his physician how he has to behave under those circumstances. Among the malformations of the uterus, Dr. H. briefly considers the obliteration of the os, as well as the obstruction of the canal of the uterine neck. The latter may be congenital, or produced by inflammation and ulceration. An instance of this kind is related, which was successfully treated by the use of sponge-tents. The extreme narrowness of the os uteri is often combined with a decided shortness of the vaginal neck. All that can be expected from treatment is a dilatation of the os tinæ. There are two kinds of elongation of the vaginal portion apt to cause sterility, one congenital, which requires amputation, one accidental, acquired by the employment of the ring pessary, which does very generally regain its former size after the use of the instrument has been discontinued. Three cases of partial hypertrophy were observed by Dr. H., one of which caused sterility. The amputation of the hypertrophied anterior lip was soon followed by conception. Congenital atrophy of the womb was encountered not unfrequently in connexion with sterility. In two cases the use of the warm douche, combined with succulent diet, preparations of iron, and the dilatation of the canal, succeeded in causing pregnancy. The uterine deviations, anteversion, retroversion, and latero-version are caused, 1. By a relaxation of the uterine ligaments; 2. In some instances they are the result of increased weight of part or the whole of the uterus; and 3. In other instances the womb has been pushed into a wrong situation by an outside pressure, and, above all, it is the abuse of the corset which produces anteversion in a large number of cases. The anteversion, if it is not of too long standing, may be sufficiently reduced to permit conception by the complete suppression of the corset, the employment of an hypogastric supporter, the application of cold uterine douches, combined with a recumbent position during the night in such a manner that the pelvis be slightly supported and elevated. After repeated trials to bring about a change o

position by means of pessaries, they were at last entirely abandoned, because they are often dangerous and almost always useless. Dr. H. applied instead the demi-speculum of Mordax, which was attached inside the vagina, where it remained during connexion. With regard to uterine flexions the treatment has to be directed, first, against the existing complications, and, after their removal, the malposition has to be cautiously treated by the use of the redresseur and a continuity of both cavities must be secured by sponge-tents. Amenorrhœa demands a general tonic treatment and local applications, among which the following are the most reputed: 1. Injections into the vagina of a decoction of mustard or ginger. 2. Injections of diluted ammonia. 3. Aloetic injections into the rectum. 4. Irritation of the uterine cavity by the uterine sound. 5. Very hot uterine douches. 6. Direct application of electricity. 7. The use of the waters of Plombières. The chapters on menorrhagia and dysmenorrhœa contain an exposition of well known theories and facts. The same may be said with regard to the chapters on fibrinous concretions, polypi, vegetations, hysteralgia, chronic vaginitis, catarrh, and engorgement of the uterus, ovaritis, and inflammation of the Fallopian tubes. In concluding, the author states it as his opinion, that diseases of the ovary, obesity, and nervous affections were very often the consequence of sterility.

This is a short abstract of Dr. Hutin's interesting little work on sterility. It is essentially of a practical turn, consisting of conclusions based on facts personally observed, a large number of which is reported. It is written in a plain, unassuming style, and is void of that idle phraseology so often encountered in works of this nature. We therefore recommend it to the profession, although it does not bear the stamp of scientific perfection. This latter remark applies more particularly to the chapter on uterine deviations, which is spare, and not thoroughly understood by the author. Sponge-tents are his hobbies, and the water of Plombières the never-failing remedy. But taken all in all it well repays an attentive perusal, inasmuch as it contains a great many practical hints and valuable suggestions for the treatment of sterility. E. N.

INTRODUCTORY LECTURES AND ADDRESSES ON MEDICAL SUBJECTS, DELIVERED CHIEFLY BEFORE THE MEDICAL CLASSES OF THE UNIVERSITY OF PENNSYLVANIA. By GEORGE B. WOOD, M.D., LL.D., President of the American Philosophical Society, &c. Philadelphia: J. B. Lippincott & Co. 1859. pp. 460.

THE author of these addresses has long occupied a most prominent position in the medical profession of this country as a teacher and author. For nearly a quarter of a century he has filled the chair of theory and practice in the University of Pennsylvania, and aided powerfully to give that far famed institution its present exalted position. On retiring from the chair, which he has so long and honorably filled, the author has sought to embody in a volume the lessons of instruction and the words of encouragement or warning which, during that period, he has had occasion to utter. This volume, therefore, consists of a collection of the author's addresses on various occasions, and are designed as parting words of advice to his former pupils, in which spirit they will be received and long treasured. They consist of two Pharmaceutical Addresses; six Lectures introductory to the course on *Materia Medica* and Pharmacy; four lectures introductory to the course on Theory and Practice of Medicine; two introductory lectures giving the result of professional observations abroad; three addresses to the graduates of the University; two biographical memoirs. We can only add that these lectures are scholarly productions, and will prove a most valuable memento of the author.

Progress of Medical Science.

PHYSIOLOGY AND HISTOLOGY.

By WM. H. THOMSON, M.D.

Nutrition of the Fœtus. (*Gaz. des Hôpitaux, Paris*, June 12.)—M. Flourens, in a communication to the French Academy, states that after feeding pregnant animals during the latter forty-five days of gestation with madder, he found the bones of the fœtus quite as deeply tinged with red as those of the mother—conclusive evidence that practically there is but one circulation in both. M. Coste, in confirmation of the experiments of M. Flourens, announced to the Academy a curious fact of the coloration being transmitted by the mother not only to the embryo or to the developed fœtus, but even to the ovum and to the substance of the germ itself, before that substance has undergone any of the transformations of which it is the seat in the formation of the first lineaments of the new being. He sees in this fact "visible evidence of the manner in which hereditary influence marks each being with an original impress, and, with existence itself, introduces the elements of health or of disease, according as it proceeds from a pure or impure source."

Besides the demonstration of the facility of pathological transmissions, the results obtained by M. Coste suggest another subject, most important in a medical point of view, whether it may not prove possible to neutralize or even destroy vicious original impressions. There is in this, M. Coste justly remarks, a fit subject for reflection and research by physicians.

Experiments on the Cervical Portion of the Sympathetic. (*Zeitschrift für Rationelle Medicin*, vol. v. 1859.)—Prof. Wagner, of Heidelberg, laments the delay caused him by the crossing of a railroad train, while he was hurrying to the anatomical theatre with the head of a woman, "carried under warm wrappings," who had just been guillotined, so that eighteen minutes had elapsed before he commenced his experiments. The inferior parts of the neck, however, were still warm, the temperature in the buccal cavity 99° 32' F., the palpebræ were open about five millimetres, the pupils and the axes of the eyes normal. The axe had cut through the sixth cervical vertebra, about an inch and a half below the enlargement of the superior cervical ganglion. First having shut the lids completely, electrical excitation was applied to the cervical part of the right sympathetic. After three or four seconds the lids opened slowly, the contraction being especially evident in the upper lid, the vertical diameter of the palpebral opening reached eight, but afterwards fell to six millimetres, the pupil was seen dilated, and under strong electrical excitation the iris had scarcely one and a half or two millimetres diameter. The same results were produced on the left eye by excitation of that side, and they could be repeated six times for twenty-five minutes. After that the lids opened much slower, not commencing till after six seconds. When it could no longer be effected after thirty minutes by applying the excitation to the end of the nerve, a feeble opening resulted by application to the ganglion itself. The iris, however, remained irritable long after the lids had ceased to respond. These movements were not caused by the superior elevator of the lids, but show all the characters of the contraction of smooth muscular fibres, as a measurable interval elapses between the excitation and the contraction, which then again outlasts, by a few seconds, the excitation. The "galvanic grimaces" produced by the excitation through motor nerves, of striped muscular fibre, are, on the other hand, immediate on the electric current.

Reproduction of Bone.—The series of experiments published by M. Ollier in the *Gaz. Heb. de Médecine et Chirurgie*, 1858, on the reproduction of bone, have deservedly attracted wide attention, their practical bearing having been

exemplified in some recent brilliant operations by Prof. Langenbeck. In his experiments on long bones, M. Ollier preferred the radius and metatarsals, because the remaining bones preserved the form and motion of the limb. In his first class of experiments the bone was removed but the periosteum carefully preserved, and the result was reproduction of the bone in six weeks or two months, in almost its original form and proportions. In his second class the bone was removed and patches of periosteum left which resulted in osseous nuclei and patches of bone corresponding to the patches of periosteum. In his third class, the whole of the periosteum was removed, taking care to preserve the celluloso-muscular envelope immediately surrounding it, and the result was a fibrous cord with a few hard osseous granules, generally at the end of the bone, at the insertions of tendons and ligaments, where there is normally no distinct periosteum. In his fourth class, in addition to the periosteum, a layer of tendons and muscles, attached to it, were removed, and no reproduction took place besides enlargement and pointing of the bone operated on. If the whole of the shaft in a long bone be removed, that which is reproduced is thin, misshapen, and unequal, with a longitudinal furrow corresponding to the site of the incision. At first it is solid, but afterwards vacuoles form, which then unite into a canal. If half of the shaft is cut out, the reproduction is entire, increasing in time to all the characters of the original portion. In flat bones generally the reproduction is very imperfect where the tissue is dense, as in the cranium the reformation takes place at the expense of the diploe, but where that is deficient the product is membranous. It follows, therefore, that the periosteum has not the same reproductive powers everywhere alike. The perichondrium reproduced cartilage readily. In the reproduction of joints, he left the periosteum to form in connexion with the capsules and ligaments, one canal, the centre of which was the cavity of the joint, so as to see if a movable or ankylosed joint would result. A true joint was produced, with loose cellular tissue between the surfaces, forming the rudiments of a new synovial membrane. The heads of the reproduced articular surfaces were smooth, polished, reddish, and harder than cartilage, but smaller in size than in the original joints.

Physiology of Digestion. (*Gaz. de Paris and Lancet*, June, 1860.)—Besides the frequent practice of overloading the stomach with food, the profession as well as the common people, have for ages overloaded it with *functions*. In reading the elaborated tables of the digestion of different articles made by Dr. Beaumont, as deduced from his experiments on St. Martin, it is curious to notice how the process of digestion from alpha to very near omega, was then considered as gone through with, all within this short dilatation in the alimentary tract, so that the question might well have suggested itself, what use was there of some thirty-five feet more of tortuous windings? Magendie, Bernard, and Corvisart then added on the duodenum with its pancreatic and biliary secretions to attack what the stomach had left, and now a remarkable accident has fortunately been turned to good account by Prof. Busch of Bonn, in determining what can be done by the small intestines, on that which has passed through both stomach and duodenum. A woman came under his hands, with a fistulous opening communicating with the small intestines, caused by being tossed by a bull. The fistula was so complete that the bowel was divided into two distinct halves, from the upper portion of which, consisting of the stomach and duodenum, the food and digestive fluids all escaped, none finding its way into the lower half, which comprised the small intestine, colon, and rectum. Her appetite was insatiable, and only by eating largely did she feel well. The intestinal secretion could be procured perfectly pure and free from chyme, but Prof. Busch always found it small in quantity. She was fed by introducing through the fistula into the small intestine, beef tea, beer, soups with flour, hard-boiled eggs, meal, etc. Soon after these injections she had frequent stools, a circumstance not observed since the acci-

dent. The evacuations had a well marked smell of putrefaction, but no undigested portions of meat or hard-boiled eggs reappeared, showing that the intestinal juice did act as a solvent on the food passing through the canal. The action of the intestinal juice was energetic on starch, which it changes into grape sugar, while it also decomposes protein substances with the phenomena of putrefaction. Its reaction is always alkaline, it has no effect on cane sugar nor on gum. Another interesting fact was that fat, introduced into the small intestine, passed through unchanged, another proof serving to localize the action on fatty substances in the pancreatic and biliary secretions. A very extraordinary fact, in considerable discrepancy with previous views, was observed in the rapidity with which the alimentary substances escaped from the stomach and duodenum. Hard-boiled eggs, taken by the mouth, appeared at the fistula in from twenty to thirty minutes, cabbage from fifteen to nineteen minutes, meat from twenty-two to thirty minutes, potatoes, fifteen minutes. The substances which escaped by the upper end of the divided canal at first sight seemed but little altered, but they were, however, considerably softened, and the meat presented both longitudinal and transverse cracks or slits. The peristaltic action apparent was very vigorous, but the intestinal tube showed periods both of rest and of motion.

Reports of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

Dr. GEO. WILKES, President, in the Chair.

JAN. 28TH, 1860.

DISCUSSION ON DIPHTHERIA.

(Continued from page 86.)

Dr. ALLEN gave the following account of a post-mortem examination upon a patient of Dr. Vedders, the young lady whose case was referred to at the last meeting, who, as expected, did not survive the night:—The pharynx was lined completely with the characteristic membrane as far down as the upper border of the larynx, and from thence it extended into the trachea and bronchial tubes, as far as the dissection could be carried. On lifting up the membrane, which was quite loose at some places, the surface underneath presented a congested and roughened appearance. No other mucous membrane was involved in the disease. In conclusion he stated that since the last meeting no more cases of diphtheria had presented themselves in Flushing, although there seemed to be an unusually large number of cases of suppurative tonsillitis.

FEB. 4TH, 1860.

Dr. GURDON BUCK read the following history of a case of the disease under consideration:—A. B., set. 17, of good constitution, complained on Wednesday, Jan. 18th, of constant chilliness, and notwithstanding the weather at that time was mild, he found himself unable to keep warm. That evening he mentioned to his nurse at the boarding-school which he attended, that his throat was sore, and on the following morning he first made a complaint of it to the teacher. His father, who was a physician, conveyed him home to Paterson that same afternoon, and on the morning following first noticed the existence of diphtheritic exudation upon the fauces. On Saturday, the 21st, I first saw the patient. He was sitting up in an easy chair with a handkerchief wrapt around his neck. A blister, two inches square, had been applied below the angle of the jaw on both sides of his neck, where there had been and still existed a slight degree of external swelling with tenderness

on pressure. The raw surfaces had no deposit of diphtheritic exudation upon them. No enlarged lymphatics could be felt. Depressing the tongue with a spoon, for the purpose of inspecting the fauces, gave him severe pain, and prevented a satisfactory view being obtained beyond the velum. A patch about the size of three-fifths of a twenty-five cent piece covered the buccal surface, and was of a pale straw color, the surrounding surface being of a pale red color. The uvula was very much elongated, swollen, and cedematous, the epithelium covering it being raised by the effusion underneath; several times the organ was projected forward in the act of coughing and lay upon the tongue. The effect of this was extremely disagreeable, inasmuch as the voice became immediately extinct. The part would soon resume its natural position again without any interference, when the voice would return. Deglutition, though somewhat painful, was readily performed; respiration was not impeded or accelerated; nor the voice hoarse or otherwise changed; he coughed very seldom; his pulse was 100 during the day, but subsided to 94 or 96 in the evening; the temperature of the body was scarcely changed from the natural standard. The tongue was moist and pasty, and the throat felt dry. The countenance was calm and natural. His bowels were quiet. We commenced fumi-gating the throat as follows: Boiling water was poured on catnip in a pitcher, and vinegar added to it. While breathing the fumes under an inclosure of blankets, Labarraque's solution of chlor. soda was added by the teaspoonful in successive portions. The immediate effect on the throat was very grateful to the patient. Wine whey and beef tea were continued alternately as they had been during the day. He passed the night comfortably, sleeping at intervals. At four o'clock on Sunday morning (22d), when I left him, there had been no visible spreading of the exudation, nor were there any signs of the disease having extended to the larynx. During Sunday sulph. of quinine, in doses of three grains each, was given every three hours. During Saturday and Saturday night the patient had epistaxis from one nostril several times; it seemed to be caused by blowing the nose, but would not continue long at a time. Early on Monday morning, Dr. Weller, who visited the patient often, noticed some increased frequency of the pulse, and also of the respiration, with constant drowsiness, notwithstanding that an inability to sleep was complained of. At 6 p.m. I saw the patient again, and found a great change for the worse. As he sat reclining in his easy chair I noticed that his respiration was accelerated to forty per minute, and was noisy, though not obstructed, from the presence of secretions in the air passages. His pulse was 140, and very weak, his hands cool, and the rest of the body scarcely of the natural temperature. A peculiar fetor was noticed in the breath, and a colorless secretion was also blown from the nostrils, which did not, however, stain the handkerchief. Stimulants had been suspended since morning, from the supposition that they provoked epistaxis; the quinine had also been suspended, owing to its supposed effect upon the head. His intellect was now becoming disturbed, and he talked flighty, but would reply intelligently and promptly when questioned. Stimulants in the form of brandy and milk punch were now resumed without delay, given freely, and alternated with beef tea. Sulph. quinine gr. j. and sulph. ferri gr. i, were also administered. A short time before my arrival the patient had a thin, copious, dark, and foetid stool; at 7 o'clock two or three such succeeded involuntarily, when an enema composed of two grains of pulv. opii and ten grains of tannin was resorted to. After this there was no repetition of the evacuations. After the first involuntary stool patient took to his bed, and assumed a position on his right side, the frequency in respiration continuing unabated. Under the influence of stimulants the surface of the body became hot, and communicated a pungent sensation to the fingers. The coma which gradually increased was accompanied with subsultus and tremors of the upper limbs. He continued to talk incoherently; when roused to take his drink he would promptly raise

himself, unassisted, on one elbow, and hold the glass in the other hand, thus evincing considerable muscular strength. All his symptoms grew rapidly worse; the tremors and subsultus disappearing, gave place to profound stupor, in which condition he died, about one quarter to three o'clock, on Friday morning, the 24th. In about an hour after his decease purpuric spots showed themselves upon the surface of the trunk and limbs.

(To be continued.)

FOURTH ANNUAL SANITARY AND QUARANTINE CONVENTION.

JACOB BIGELOW, M.D., PRESIDENT.

June 14th, 1860.—The National Sanitary Convention assembled at Boston, in the Hall of the Mechanics' Association, Bedford street. The attendance was very large, and the proceedings spirited.

The venerable Dr. Jacob Bigelow was elected *President*; *Vice Presidents*, Hon. D. Arnold, M.D., of Georgia; Alex. H. Stevens, M.D., of New York; H. G. Clark, M.D., Boston; John F. Lamb, M.D., Phila.; J. Gilman, M.D., Md.; Hon. Moses Bigelow, N. J.; Hon. J. C. Knight, R. I.; Robt. Thompson, M.D., Ohio; C. D. Guthrie, M.D., Tenn.; Thos. Stewardson, M.D., Penn.; J. W. Houck, M.D., Baltimore; and Hon. Thos. Aspinwall, of Boston.

Secretaries—Calvin Ellis, M.D., Boston, assisted by Dr. J. B. Jones, of Brooklyn; Dr. Wm. Taylor, of Penn., and Ald. D. C. Dodd, Jr., of N. J.

A Committee on Business was appointed, and the Convention proceeded to the consideration of Reports from Standing Committees, after listening to some remarks from Gen. P. M. Wetmore upon the subject of a permanent organization, under the title of a National Association.

Dr. C. B. GUTHRIE presented a printed Report from the Committee on the Control and Sale of Poisons and Dangerous Drugs, which, after an interesting discussion, was laid upon the table, to be acted on at a future time in the session.

Dr. ALEXANDER H. STEVENS made some practical remarks on the subject of ventilation, expressing the opinion that if more attention were given to the ventilation of cellars and basements in dwelling-houses, many cases of disease and death would be prevented, which now occur in families where the domiciliary hygiene is otherwise good. Dr. Childs, of Mass., and Dr. Thompson, of Ohio, offered remarks upon the same subject.

Dr. ARNOLD, of Savannah, made a verbal Report on Vaccination, strongly advocating the enactment and execution of appropriate laws upon the subject in every State.

Hon. MOSES KIMBALL offered the following preamble and resolution:—

Whereas, In view of the panic existing in this and other States, in regard to the disease among cattle known as "pleuro-pneumonia," and the uncertainty as to whether the said disease is contagious or infectious, and also as to the best mode of treatment or of possible cure—therefore

Resolved, That a Committee be appointed to take the whole subject into consideration.

After some discussion, it was decided that the Convention could not undertake such an investigation with any prospect of arriving at satisfactory conclusions on the subject, as it would be necessary for such a Committee to enter upon protracted and expensive labors, which are already being performed by a special legislative commission.

The discussion upon the Report on the Sale of Poisons was resumed, and it was finally resolved to recommend immediate action on the subject, by the various State Legislatures.

Dr. SAYRE then moved that a copy of the resolution be sent by the Secretary of the Convention to the Governors of the different States, accompanied by a copy of the report.

Thursday evening was spent by the Delegates in the enjoyment of the elegant hospitalities of a large number of the prominent families of the city.

Friday June 15th, Hon. Dr. Arnold in the Chair.—After reading of the minutes, the Convention took into consideration the Report of the Committee on External Hygiene, which, after free discussion and a few verbal amendments, was unanimously adopted. This Report, which had been prepared with great care by Drs. Bell, Harris, and Jewell, was received with peculiar favor.

Dr. Griscom, from the Business Committee, reported the following resolutions:—

1. *Resolved*, That the report of Dr. Guthrie, Chairman of the Committee on Poisons, &c., be published in the Transactions of this Convention, without the appendix.
2. *Resolved*, That this Convention deems it inexpedient to recommend any action by this Convention on the subject of the disease known as "pleuro-pneumonia" said to be prevalent among cattle.
3. *Resolved*, That the report on Civic Cleanliness be recommended to the Convention for adoption and publication in the Transactions, and that the Secretary be authorized to transmit a copy of the report, and a separate copy of the memorial appended thereto, to the authorities of every incorporated city in the United States.
4. *Resolved*, That the report of Dr. Snow on Registration be referred to the Convention for consideration, and recommended for adoption and publication in the Transactions of the Convention.
5. *Resolved*, That a committee be appointed to take into consideration the expediency of a permanent organization of this Convention, to be called the "American Sanitary Association," to report at the next meeting; and, if favorable thereto, to present a plan of organization.

These resolutions were passed separately.

A Committee on State Medicine was called for by a resolution offered by Dr. Ordronaux, of New York, which, after being discussed, was referred to the Business Committee.

Dr. STERLING's Report on Wet Docks was read and discussed, and it was

Resolved, That the report upon the Utility of Wet Docks be referred to the Committee on External Hygiene, with powers.

Dr. JEWELL proposed that the following resolution should be laid upon the table, to be taken up this evening.

Whereas, At the last meeting of the Convention, after a learned and dispassionate discussion, the long-agitated question of the non-transmission of yellow fever from one person to another, was definitely settled; in order to strengthen that decision, therefore

Resolved, That the action of the last Convention on the question of the non-contagiousness of yellow fever, to be found on page 45 of its Transactions, be and is hereby re-affirmed.

On motion of Mr. HALLIDAY, the Committees which had not reported, were called upon. Various reports and apologies from such committees were received, and various new committees were appointed; others were ordered continued.

A recess was taken during the afternoon, to visit the various public institutions in Boston Harbor. The visit was one of great interest, and terminated at the House of Refuge, on Deer Island, where a sumptuous repast, and much speaking by men who spoke well for humanity and health, closed the afternoon. In the evening Dr. E. Harris, of New York, read a paper on the Utility and Applications of Heat as a Disinfectant. The paper drew out an interesting discussion, and elicited many valuable facts from Delegates.

Dr. GRISCOM, from the Business Committee, reported the following resolution.

Resolved, That the resolution presented by Dr. J. Ordronaux, for the appointment of a Committee on State Medicine, be referred back to the Convention, with a recommendation that it be passed after omitting the word *and*.

This was discussed by Generals Mather and Wetmore, Dr. Griscom, Mr. Kimball, Drs. Ordronaux and Arnold—the latter having resigned the Chair for the purpose. Finally, on motion of Alderman Wightman, the subject was referred back to the Committee.

The Convention then adjourned to meet at 10 o'clock on Saturday morning.

Saturday, June 16th.—The Convention was called to order at 10 A.M., by Dr. Arnold, but Dr. Bigelow soon took the Chair.

Dr. GRISCOM, from the Business Committee, reported the following resolutions.

1. *Resolved*, That the Committee recommend that the paper presented by Dr. E. Harris, of New York, "On Heat as a Disinfectant," be published in the Transactions of the Convention.
2. *Resolved*, That the Committee recommend to the Convention the pas-

sage of the resolution offered by Dr. Ordronaux, modified as follows:—"Resolved, That a Committee of five be appointed, to be called the Committee of State Medicine, whose duty it shall be to report to the next Convention such subjects of sanitary importance, as in their judgment require investigation or legislation for their permanent improvement."

3. *Resolved*, That a Committee of three be appointed to report upon the subject of Vaccination, and the best method of obtaining its general application, especially in cities.

4. *Resolved*, That the Committee on the Nature and Causes of Malaria be discharged, and that the subject be referred to a New Committee, to report to the next Convention.

The report being accepted, it was voted that the resolutions be taken up in detail, and after discussion of the second, they were severally adopted.

Hon. Edward Everett and Dr. James Jackson being present, were invited to seats upon the platform; various resolutions and brief addresses were made, and votes of thanks to the officers and the City Council were passed.

The preamble and resolutions announced by Dr. Jewell, yesterday, were then passed.

Mr. G. H. SNELLING, of Boston, spoke of the importance of a longer interval at noon between the working hours of mechanics, and offered a resolution, but accepted a modification of it by Dr. Jewell, which was adopted.

Resolved, That a committee of three be appointed to consider and report upon the best plan for such a division of the hours of labor among all classes of the community, as shall be promotive of health.

Remarks upon the subject were made by Drs. Stevens, Griscom, Jewell, Savage, of New York, Bell and Curtis.

The Convention was invited by Dr. Mead to meet in Cincinnati, by Dr. Jones in Brooklyn, and by Mayor Knight in Providence. The former city was selected.

The following resolution, offered by Gen. Mather, was adopted:—

Resolved, That nothing contained in the resolution relative to the appointment of a Committee on State Medicine shall prevent this Convention from referring at any time, any matter embraced therein, to any committee or committees, nor prevent any individual from bringing proper matters before the Convention.

Mr. ELLIOTT, of Boston, offered the following resolution, which was adopted:—

Resolved, That a committee of five be appointed to report a uniform plan for maps of the physical geography of cities for statistical and sanitary purposes, with a view of obtaining the construction of such maps by the several municipal governments.

Dr. GRANT, of New Jersey, offered the following resolution, which was adopted:—

Resolved, That this Convention, as one of the means of sanitary reform, urges upon the municipal authorities and boards of health of the several States to collect and carefully arrange complete statistics of births, marriages, and deaths, and also of disease, meteorology, and epidemics, except in cases where this work is provided for.

It was voted, on motion of the Committee on External Hygiene, that two members, appointed by the Chair, should be added to their Committee. Hon. Dr. Arnold and Dr. H. G. Clark were added.

It was voted, on motion of Dr. Griscom, that the Committee on Civic Cleanliness be continued.

The following resolution, offered by Dr. Snow, of Providence, was adopted:—

Resolved, That the thanks of this Convention be presented to the Board of Directors of Public Institutions of the City of Boston, for the pleasant excursion, which has afforded us an opportunity to visit these institutions, and for their princely hospitality, which we have so much enjoyed.

Mr. BELL offered the following resolution, which was accepted:

Resolved, That the Committee on External Hygiene have power and be directed to select a suitable person from each State not represented in this Convention, to aid in carrying out the objects of the second resolution of their report.

It was voted, on motion of Mr. Wightman, that Dr. H. G. Clark be added to the Committee on Tenement Houses.

Dr. THOMPSON thanked the Convention, in behalf of Ohio and Cincinnati, for the honor conferred upon them.

The Standing and Special Committees for the year were appointed, being ten or twelve in number, and after a few words of farewell by Dr. Bigelow, the Convention adjourned.

Obituary.

DEATH OF DR. ADDISON.

This distinguished physician died June 29th, at the age of sixty-seven. He was a colleague of Dr. Bright in Guy's Hospital, and labored conjointly with him in the preparation of a work on Medicine, one volume only of which was published. His contributions to medical literature were not numerous, and are mostly to be found in Guy's Hospital Reports. His last discovery, and that by which his name and fame will be perpetuated, was the disease dependent upon morbid changes in the supra-renal capsules, now known as *Morbus Addisonii*.

Medical News.

ARMY MEDICAL INTELLIGENCE.

The resignation of Asst. Surgeon William A. Hammond, U.S.A., has been accepted by the President, to take effect October 31st, 1860.

The leave of absence heretofore granted to Assist. Surgeon Geo. K. Wood, has been extended three months by order from the War Department.

Assist. Surgeon Charles H. Smith, is detailed to act as Recorder of the Medical Board appointed by the War Department, to meet at Baltimore, Md., Sept. 20, 1860.

The leave of absence heretofore granted to Assistant Surgeon S. W. Crawford, has been extended until the 30th of September next.

Surgeon R. H. Coolidge has been ordered to repair to Philadelphia, upon business connected with the Medical Department.

Acting Assistant Surgeon J. J. Hull, on duty with recruits for Utah, arrived at Fort Laramie, N. T., July 14th.

Assistant Surgeon J. F. Head, and Acting Assistant Surgeon J. G. Cooper had, by last accounts, arrived at Fort Benton with the Oregon recruits.

EPIDEMIOLOGICAL RECORD.

YELLOW FEVER—Havana.—The *Cuban Messenger*, of July 15, says—"Since the 1st of June, to the 13th of July at 10 A.M., the total number of *vomito* cases has been 519, both in public and private practice (in the hospitals and private residences), and out of the whole number only thirty-nine have died. Since the 1st inst. to date, there have been, altogether, 342 cases and 32 deaths, according to the official reports. There are, perhaps, a half-dozen cases of deaths, where medical aid was not called in until there was not life enough left in the patient to admit of any assistance."

The *Diario* gives for the same period, for all the ports of Cuba, total number of cases, 699; deaths, 82.

RHEUMATIC MENINGITIS—New York.—Dr. T. G. Thomas, of this city, at a recent meeting of the Medical Union, reported five cases of rheumatic meningitis which had come under his observation within a very brief period, two of which had died suddenly at an early period of the disease, and one had recovered with partial loss of the volitional and mental faculties.

DIPHTHERIA—Homer, Cortland Co., N. Y.—Dr. Geo. W. Bradford reports the prevalence of this malady in this locality. *South Onondaga, Onondaga Co., N. Y.*—Dr. J. J. Kneeland writes that five cases of diphtheria have occurred in that vicinity recently, of which two proved fatal. *West Stockbridge, Berkshire Co., Mass.*—Dr. Levitt reports the prevalence of diphtheria, in this and adjoining towns. *Treatment*, general, tonics and stimulants; local, nitrate of silver, free scarifications, especially where oedema exists, excision of tonsils and uvula.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 31st day of July to the 28th day of July, 1860.

Deaths.—Men, 73; women, 80; boys, 170; girls, 181—total, 504. Adults, 153; youths, 15; children, 335; males, 243; females, 261; colored persons, 2. 296 infants died under two years of age. Among the causes of death we notice:—cholera infantum, 120; infantile convulsions, 38; croup, 6; diarrhoea, 17; dysentery, 9; scarlet fever, 23; typhus, and typhoid fevers, 7; small-pox, 8; consumption, 57; infantile debility, 9; marasmus, 47; droopy of head, 16. Classification: brain and nervous system, 87; respiratory, 88; digestive, 227. **Public Institutions:** Almshouse, Blackwell's Island, 14; Bellevue Hospital, 20; City Hospital, 7; City Prisons, 1; Colored Home Hospital, 2; Island Hospital, 3; Lunatic Asylum, Blackwell's Island, 2; Nursery and Child's Hospital, 5; St. Vincent's Hospital, 2; Small-Pox Hospital, Blackwell's Island, 2; Ward's Island Emigrant Hospital, 7—total, 65.

The number of deaths, compared with the corresponding weeks of 1858 and 1859, and of last week, was as follows:

Week ending July 31, 1858 698

" " July 30, 1859 616

" " July 21, 1860— 112

From acute disease 291

" chronic disease 159

" external causes, &c. 46—496

Week ending July 28, 1860—

From acute disease 304

" chronic disease 171

" external causes, &c. 29—504

Increase this week 8

Total interments in Potters' Field 49

Coroners' cases 30

JULY.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10	In.
22d.	29.84	.22	73	66	77	12	16	NW. to SE.	2.5	
23d.	29.68	.22	78	64	81	8.5	17	SE. NW.	2	.34
24th.	29.82	.24	69	69	75	12	17	NW. SE.	.06	
25th.	29.97	.06	73	66	81	9	15	W. S. E.	2	
26th.	29.90	.24	75	68	88	6	10	SE.	4	2
27th.	29.90	.20	74	65	88	8	14	SW. NW.	2.5	.28
28th.	29.04	.04	71	62	77	10	14	NE. SE.	2	

REMARKS ON THE WEATHER.—22d. Day fine, with light wind, gale late at night. 23d. High wind early morning, with rain; fresh during the day. 24th and 25th. Fine; wind light, A.M., fresh, P.M. 26th. Sultry; wind light, thunder storm, P.M.; one inch of rain fell in seventeen minutes; wind during the storm varied from SE. to SW. and NW. 27th. Rain early morning; wind light all day; damp, A.M., dry, P.M. 28th. Dry, A.M.; P.M. damp, wind light.

MEDICAL DIARY OF THE WEEK.

Monday, Aug. 6.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Taylor, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Aug. 7.	{ BELLEVUE, Medicine, Dr. Elliot, half-past 1 P.M. CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
Wednesday, Aug. 8.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Griscom, half-past 1 P.M. BELLEVUE, Surgery, Dr. Meir, half-past 1 P.M.
Thursday, Aug. 9.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Greene, half-past 1 P.M.
Friday, Aug. 10.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Aug. 11.	{ BELLEVUE, Surgery, Dr. Mott, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Griscom, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

Original Lectures.

CLINICAL LECTURE ON AMPUTATIONS.

DELIVERED AT THE NEW YORK HOSPITAL,

BY

JOHN WATSON, M.D.,

ATTENDING SURGEON.

GENTLEMEN:—In keeping with a promise I made you a few days ago, I shall say a word or two with reference more particularly to operations for amputations. Those of you who are in the habit of visiting here will have observed that there are different modes of performing such operations, each surgeon having his own particular plan; in fact, there is no established rule set down for practice in this institution, nor anywhere else.

I may say, to begin with the history of surgical operations known as amputations, that very little is said concerning them in the ancient books upon the subject—for the reason that the surgeons in those days were afraid to perform them. They were in the habit of leaving such cases requiring amputation, to nature, and when the "line of demarkation" had formed, they would lop off the limb through one or other of the articulations. In the time of Ambrose Paré, when there was offered every facility for the practice of military surgery, surgeons did not wait for mortification to take place, but when the circumstances required it they amputated at once. The mode of procedure by Ambrose Paré was this: He first applied a ligature tightly around the limb, above the point where the amputation was to be performed, the object of which was to restrain the bleeding. Now this surgeon by so doing made a great step as far as the advance in surgery was concerned. The question might be asked—Why did not the ancients think of this? The answer simply is—That they had not advanced so far in their surgical anatomy as to understand it. If you read Galen you will see that the old writers had no idea whatever of the circulation. Galen's idea was, that the blood went backwards and forwards through the body, resembling very much the ebbing and flowing of the tide in the sea. As they were in ignorance of any systematic departure or return of the blood, the necessity of placing a ligature above the bleeding points was not thought of. Now, after they had cut off a limb in old times, their mode of checking the hemorrhage was somewhat peculiar. They would have their heated irons at hand and apply them to the bleeding surface, thus making an eschar that would plug up the open mouths of the vessels. I told you, in speaking of varicose veins that Celsus was the first one who described the method of putting a string on those vessels,—he also was in the habit of tying the two cut ends of a bleeding vessel, but he never had the audacity seemingly to apply that principle in the treatment of stumps. Ambrose Paré, however, thought it was necessary to make the vessels of the stump more secure against any secondary attack of hemorrhage; accordingly after one of his amputations he brought out the vessels and tied them. This is the first account we have of the application of a ligature after amputations. The mode of applying the ligature, however, was so crude, so much tissue was tied up with the vessel, and the patients complained of so much pain in consequence, that some surgeons were disposed to abandon the practice altogether.

At a still later period we find another improvement being made. The mode of operation in Ambrose Paré's time was to make a circular incision of the limb from the integument directly to the bone; the object seeming to be the performance of the operation as quickly as possible. The wound would heal then as an ordinary ulcer. It was afterwards found that the surface of the stump would heal more readily if the skin was drawn over the section. The credit of first

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introducing this practice is due mainly to the English surgeons. Mr. Alanson, who lived a hundred years ago, did a great deal in this matter, but I do not say that he was by any means the first who called attention to the subject. This, then, was a second step towards the improvement in the operation. At a still later period it was thought that the stump would do better, that the wound would heal more readily, if not only the skin covered the cut surface, but also some fleshy tissue, and this led to another improvement, generally known as the flap operation, which was practised very extensively thirty or forty years ago. It had an enthusiastic supporter and advocate in the person of Mr. Liston, who did not omit an opportunity of performing it. About the time I came on duty here, flaps were very much in vogue, and I, with others, at that time made use of them almost exclusively. After a while, however, I found by experience, that it was not the best way of operating, more especially after anaesthesia was discovered. Without anaesthesia the flap operation as an operation, is perhaps the best and the most beautiful, because it is done in the shortest possible time—hardly a moment being requisite. But, on the other hand, you have a very broad surface exposed, the vessels are cut obliquely a circumstance which tends to favor hemorrhage; and besides, when the edges of the flap are brought together there is a great opportunity for the accumulation of matter in the bag thus formed. Again, exfoliation of the end of the bone is not of unfrequent occurrence after this operation. One of the advantages that are claimed for it is this:—that there is left a better cushion for the end of the stump than in the conical method. But experience has shown that such is not the case. So large a granulating surface necessarily occupies a good deal of time in healing, and in the meantime the muscular tissue forming the flap becomes atrophied, and not unfrequently nothing is left to cover the end of the bone but skin. At the present day some still operate by the flap method, some by simply turning back portions of the skin, and others by what is called the conical method. The latter is my favorite one, in fact I use no other. I make the first cut as nearly circular as I can; I then separate the skin from the subjacent tissue to the distance of a full half inch above the original point of incision, merely retracting without everting. Next I make a cut through the superficial muscles, give them sufficient time to contract, then follow the incision through the deeper layers in the same way, until the bone is reached. After dividing the periosteum, I peel it up an inch or so in order to have something to spare after retraction. I saw off the bone two or three inches up. The resulting stump will be conical in shape, and will be found composed of skin and muscular tissue as well; and having preserved more periosteum than was absolutely necessary, no chance is left for the exfoliation of bone.

What are the points to guard against in performing this operation? In the first place, if you have too much skin, it forms a flaccid covering, which favors the collection of matter, and prevents union by first intention. On the other hand, if there be too little integument, the surface of the stump must heal as an ordinary ulcer, requiring, not uncommonly, months for the completion of the process. The indication is to have skin enough to fall easily over the face of the stump, and the cut surfaces to come in contact on the two sides, without leaving any space between. If you succeed in accomplishing that, you favor union by first intention, and that is really the great end to be looked to.

Now, there are other things to be taken into account besides the mode of cutting. The mode of securing vessels is worthy of our serious consideration. It is not well to take up too many, but only those, as a general rule, which are liable to bleed freely—the principal arteries, for instance. If sufficient time is allowed after the operation, nothing more is required; this can easily be done in private practice, but from the expeditious manner in which we are compelled to perform such operations in the hospital, no such opportunity is allowed, and consequently a number of ligatures have to be applied. *Leave the stump open to the air.* This

is really the best styptic for smaller bleeding vessels. In the course of time, say at the end of a couple of hours, you will find that the cut surface has ceased to bleed, the mouths of the smaller vessels are plugged up with coagula, and the whole is covered over by a thin glazing of lymph. If you wait until all this has taken place before you bring the edges of the wound together, you will succeed five times as often in getting union by first intention than by any other way. Old Celsus knew better what was wanted in these cases than even John Hunter himself, notwithstanding the latter has received so much praise upon the subject. Old Celsus tells us not to close up the wound until the surface is perfectly dry; that it is the lymph which tends to union by first intention, and not the presence of blood between the cut surfaces. The blood, as soon as it escapes from the vessel, is foreign matter, and, as such, becomes analogous to pus. Liston was in the habit of recommending the operator, in private practice, to wait a couple of hours before dressing the wound. I have done it, and can testify to the good results of such a practice. Now, the material of which the ligature is made is a matter of some consideration also. In old times, the ligatures that were applied were made of flaxen thread, iron, silver, and gold wire. A good deal is said, now-a-days, about silver sutures and silver ligatures, as if it was really a new thing. Here lies on this table a book, written three hundred and twenty-five years ago by John Rhodius of Padua, on the use of metallic ligatures, published in the year 1639, in which he gives the authority of the ancients, as well as of the surgeons of the middle ages, for the use of these materials. So we see, far from its being a new discovery, it is one of the many things in the profession which is very old. When I was a student, I recollect the use of the pin suture in the European hospitals; and it is really, after all, nothing but the silver suture. This brings me to the notice of the fact, that metallic ligatures have sometimes been placed on bloodvessels, and metallic pressure made use of as a means of controlling hemorrhage in preference to the silk ligature. One of the distinguished practitioners of this city, in an anniversary discourse before the Academy of Medicine, on the use of silver sutures, says, that in a few years the silk ligatures will be abandoned, and the silver suture will be used altogether. Such an expression is only pardonable on the score of enthusiasm. We have been told that silk sutures are poisonous to the human flesh, provoking the establishment of issues, ulcerations, etc. Why, there is no more poisonous influence exerted by them than would be by simple salve. Then, again, that they cause extensive suppuration. Did you see that stump in one of the lower wards? There is an instance of the effects of the much-talked-of acupressure method, by the use of silver pins. In the track of every one of them there is a line of suppuration, and that, too, when they had pierced the flesh but three days. The great use, gentlemen, of the metallic ligature is this; not that they are any better than silk, but because you can use a finer piece, and *the finer the suture, the less the irritation*. If you use a very fine wire, you have more power than thread. I don't wish to be understood as disapproving of the silver ligature; it is a very good thing in its place; it is, in fact, an admirable thing in some operations, as, for example, in our friend Sims's operation. Its great use in the treatment of vesicovaginal fistula consists in the fact, that but exceedingly small holes are made in the mucous membrane, and hence there is no chance for the escape of the urine into the vagina, a circumstance which would be very apt to occur if an ordinary silk suture was made use of. In all such operations, then, the silver wire is by all odds the best; but this is not the case in the ordinary ligation of vessels. I would advise, in all these cases, the silk ligature, or, if you prefer it, the common flax thread, although the former possesses more smoothness, is more round, and can be made stronger. If you want to study the true philosophy of the use of ligatures, I recommend you to take hold of that very pretty little book by Mr. Jones on this subject. He made a great

number of experiments, thirty or forty years ago, on various animals, to try the effects of the different kinds of ligature upon the vessels of each. He has demonstrated, as the result of these experiments, that a small *round silk thread is the true beau-ideal of a ligature*. If the principles laid down by this gentleman were followed as they should be, we would not hear so much talk concerning this acupressure.

There is a word or two to be said in reference to the mode of treating stumps. In old times the chance of obtaining union by first intention was so slim, that surgeons were in the habit of abandoning the idea altogether, and the French went so far as to say, we should not attempt to obtain an early closure of the wound, but, on the other hand, should strive to prevent it. And Mr. Roux, speaking of the practice of the English surgeons, says, that they strive for primary union after amputation, but that the French knew better, and consequently did not try. They (the French) were in the habit of separating the edges of the wound by stuffing in tow. Well, if you wish to excite suppuration, that plan is as good a one as allowing effused blood to remain between two cut surfaces. It is not necessary after amputation to use many sutures through the skin. If you have performed your amputation properly you have your skin in contact, edge to edge, and that without any stretching. You will find under those circumstances all that is requisite to keep them in coaptation is the application of adhesive straps. You have seen this done in the last amputation performed. If you find there is a little redundancy of the skin, or, on the other hand, an insufficiency of the same, then the sutures come to your assistance by keeping the parts in contact. I take it then that you brought the edges of skin nicely together. The next thing to be done is to secure the limb, in order to prevent painful spasm and retraction of the muscles that have been cut into. These muscles must be steadied by a little lateral pressure; and to effect this object you will apply a circular roller, from above downwards, sufficiently tight to support the parts snugly without interfering with the circulation. If the section is made through a part of the limb where there is but a small amount of muscular fibre, the circular roller may be dispensed with. In reference to the amount of dressing, I may say here, that in hot weather it should be your endeavor to make it as light as possible. The roller being applied, the next thing to be done is to control the inflammation. To effect this you must keep the limb steady, that is one thing; and you must keep it cool by evaporating lotions, that is another thing. As a lotion, water is preferable to everything else, the adhesive straps will not be loosened by it, which would be the case if spirit was mixed in it. The next question that comes up is, what time shall the first dressing be removed? Now lay down this as a rule, *never remove them as long as the parts keep dry*, as long as there are no evidences of inflammation present in the shape of effusions. If the dressings are properly applied in the first place, when no sutures are used, and you wish to give your patient every chance for primary union, you can keep it on sometimes for a fortnight. I recollect performing an amputation, some time ago, upon a lad in Brooklyn by the conical method. In that case I used very few sutures, and those I cut out shortly after without disturbing the bandages, leaving the edges of the wound only approximated by adhesive straps. At the end of two weeks, when the dressings were first removed, the whole was found to have united by first intention. In private practice I have frequently had such a result by such a method of procedure, but in the hospital I, in common with others, have not been so fortunate. This latter can be satisfactorily explained when we take into account the many obstacles to the establishment of primary adhesion that exist in every hospital ward; the tainted air; the near proximity to all varieties of wounds undergoing suppuration, etc., etc.

When the first dressing is to be removed, let it be done, one strap at a time, in order that you shall not interfere with any slight adhesions that might have taken place. If

this precaution is taken, you will find that you can obtain adhesion of one portion of granulating surface to another, thus saving space in the formation of cicatricial tissue. Let me give you an illustration. In hare-lip sometimes you will find that your dressings fail to keep the parts in contact, and the wound gapes anew. Now even when this has occurred, and the wound has remained open for three or four days, or perhaps longer, you can, by drying the cut edges and removing the coagulated lymph from the surface, secure union as readily as if nothing of the sort had taken place. This is generally known as union by the adhesive process, or the modelling process of McCartney.

There are a good many interesting points connected with the subject of amputations which we have not now time to consider. I shall, however, take another occasion to do so.

Original Communications.

ON DIPHTHERIA AND DIPHTHERITIC AFFECTIONS.

A CONTRIBUTION TO INFANTILE PATHOLOGY.

BY A. JACOBI, M.D.

A FEARFUL epidemic, after having visited New York city for a considerable length of time, seems to have fairly reached its end, only a limited number of diphtheritic affections having come under the observation of medical practitioners for the last few weeks. It has been our lot to meet with a large number of diphtheritic affections, both in private and dispensary practice, and we may fairly state, that amongst the five hundred cases that have come under our notice nearly all, or perhaps all, the differences of symptoms, consequences, and final results of diphtheria, enumerated by the large number of authors who have written the history of epidemics, or given their opinions on the pathology and treatment of the disease, have been observed by us. We mean to give, in the following pages, in a short and concise manner, our experience as to the symptoms of the disease, its nature, and its treatment, stating at once that we do not at all claim autodidactic originality in all the assertions and opinions laid down in this paper, particularly on treatment. On the contrary, we have carefully studied the opinions of authors, and their manner of managing a comparatively new and, to many, unknown disease. We decline, however, to give in the following anything that would be required in a complete monograph, viz. history, names of authors, comparison of different epidemics, etc.; it merely being our practical aim to describe the disease as we have met it in this city, adding our views on its pathology, and to give our therapeutical experience and views for the benefit of such professional brethren in other communities who will have to fight the same enemy at some future period.

Before entering, however, upon our subject, we have to perform the duty of stating, that the number of five hundred cases of diphtheritic affections observed by us for the last two years is by no means entirely exact. We did not feel any particular interest in taking accurate notes of every mild case, after the epidemic had made fair progress. Such cases only as were particularly instructive and interesting, have found place in our note-book. We give but the number of such cases observed in the "Children's Department German Dispensary of the city of New York," where every case, both mild and severe, is carefully noted; but we may be allowed to add, that our private practice has offered a larger number of patients than the Dispensary. Thus, for instance, the journal of the Dispensary shows, for January 1880, the number of eighteen cases of membranous diphtherite, and nine cases of affections considered by us

to belong to the range of, and caused by, the epidemic; while the record of our private patients, during the first week of January, gives, out of the whole number of seventy-seven patients, sixteen cases of membranous diphtheria, and thirteen of the second class. This distinction has always been kept by us; the diagnosis of diphtheria never being considered as unimpeachable except in such cases as offered well developed membranes; among the second class of such diseases as were considered by us to be influenced or brought on by the epidemic genius, we have counted and put down stomatitis, pharyngitis, diphtheritic pharyngitis, cervical adenitis, and diphtheritic fever.

In the children's department of the same Dispensary the following number of patients affected with diphtheria, and kindred diseases, have been observed:—

	Diphtheria.	Kindred Diseases.	Whole No. of Patients.(a)
1858—April . . .	—	5	128
May . . .	2	6	107
June . . .	2	1	113
July . . .	—	—	220
August . . .	—	4	222
September . . .	—	8	176
October . . .	—	9	155
November . . .	1	3	96
December . . .	—	4	80
1859—January . . .	5	6	90
February . . .	12	3	120
March . . .	21	12	145
April . . .	17	6	115
May . . .	13	7	141
June . . .	8	7	105
July . . .	4	12	208
August . . .	5	8	178
September . . .	5	21	137
October . . .	4	13	101
November . . .	10	12	139
December . . .	4	13	90
1860—January . . .	18	9	112
February . . .	13	5	104
March . . .	26	2	129
April . . .	12	8	141
May . . .	4	12	145
June . . .	8	13	158
July . . .	11	16	221
Whole number, for the last nineteen months, }	200	185	2577

What is diphtheria?

Diphtheria, or diphtherite, is, in its broadest sense, and from a merely anatomical point of view, a morbid condition recognisable by the exudation of fibrinous pseudo-membranes. They generally coincide with pernicious forms of inflammation, and are, in the majority of cases, exuded after a catarrh has preceded. The pseudo-membranous exudation consists of fibrine, and is generally accompanied by serous secretion in its neighborhood, and hyperæmia and swelling of the surrounding parts. The microscope shows it to be an amorphous and homogeneous mass, usually interspersed with imbedded epithelial cells, and by multiform, sometimes spherical, sometimes angular, corpuscles of mucus. The exudation is tough and elastic, or soft and pulpy, or friable, sometimes very apt to macerate, and very much like a serous liquid. It is usually membranous, expanded over a plain surface, sometimes extending into the subjacent tissue, and in some few cases forming hard lumps, of irregular shape, of a fibrinous mass imbedded in the organic tissue. Its composition is proved to be fibrinous by chemical tests. In this respect it is like the plastic exudation into the bronchi and lung-cells observed in pneumonia, where fibrinous coagulations are sometimes expectorated together with bronchial mucus.

(a) Means all the patients under fourteen years, except those treated in the department for surgical and skin diseases.

The pseudo-membranes differ in size, thickness, and color, as well as in consistency. Their shape is very multiform; some are round, some angular, some regular, some irregular; their thickness varies from a transparent thinness to a quarter of an inch and more; their color is white, glassy, greenish, grey, yellowish, reddish, brown, according to their thickness, exposure to the air, and admixture of blood; sometimes unaltered blood adhering to its lower surface. They are either merely adherent to a mucous membrane, without any alteration of its tissue; such is usually the case on the mucous membrane of the bronchi and trachea, and mostly on the velum palati. Or they are imbedded in its substance, as mostly on the tonsils, and the posterior wall of the pharynx, and frequently in the larynx. It is also a very remarkable fact, that the same continuous membrane will alternately be readily removed from the surface of the mucous membrane, and again at a very short distance tear the substance of the mucous membrane at every attempt at separating it. The surrounding parts are hyperæmic, and swelled by cedema during life; at post-mortem examinations the cedematous swelling is sometimes found, but the hyperæmia is no longer met with after the refrigerating and contracting influence of the atmosphere has had time to operate. Pseudo-membranes are found in the pharynx, on tonsils, uvula, and velum, on the gum, lips, and tongue, on the mucous membrane of the mouth and nose, in the larynx, trachea, and bronchi, in the superior part of the œsophagus, in the lower part of the intestinal canal, round the anus, in the vagina, the external ear, the naso-lachrymal duct, on the conjunctiva, and on the cutis wherever, and by whatever cause it has been deprived of its surface, sore nipples, etc. In all these places the chemical as well as the microscopical constitution of the membranous exudation is entirely the same.

It is a remarkable fact that the majority of inflammatory processes attended with membranous exudation take place in the pharynx; cases of both sporadic and epidemic pharyngeal diphtherite will sometimes be accompanied with diphtheritic processes of other parts; but diphtherite of the external ear, or vagina, will but seldom be heard of without being accompanied with pharyngeal diphtherite. The few cases of this kind observed by us we count among exceptional curiosities. Next to pharyngeal diphtherite, in frequency, comes the mucous membrane of the respiratory organs, especially of the larynx and trachea, and the nostrils. Sometimes the exudative process will either extend from one part to the adjoining one, or will merely wander; sudden transmission to distant regions, or cotemporaneous affection of distant parts, being usually not observed, except in epidemics of diphtheritic affections. To this point we shall return at some future occasion.

We have stated, that the majority of diphtherites are met with in the throat. Thus it occurs that the term of diphtherite is usually applied and attributed to the peculiar process of exudation in the fauces; so much so, that we generally have forgotten that dysentery, croup, etc., consist in, and show, the same anatomical lesions as diphtheritic sore throat; the difference of accidental symptoms and our tendency to classification either preventing our perceiving or acknowledging the equality in what simulates differences. Certainly, the same physiological or pathological process, in different organs, ought to be understood to offer a series of differing symptoms.

Our past epidemic has again proved that diphtherite is, in almost all cases, confined to, or originates in, the throat. Thus, diphtherite and diphtheritic sore throat are almost, as it were, identical terms. At all events, the presence of membranes in the throat may be taken as the ordinary occurrence; and in the following symptomatology we speak with particular regard to this usual form of diphtheria.

A child shows symptoms of moderate fever; pulse accelerated, perhaps a little small; face somewhat flushed, submaxillary region a little swelled to both sight and touch; more or less headache is complained of, swallowing has been interfered with for some days; tongue has a soft,

creamy whitish, or whitish grey or yellow fur, diminishing in thickness towards the lateral, and particularly the anterior region, where the papillæ appear a little enlarged and higher colored. One or both tonsils, or the posterior wall of the pharynx, the velum, uvula, or some of the enumerated parts at the same time, are covered with a membrane as described above. The surrounding mucous membrane looks red, livid, is hyperæmic, and shows cedematous swelling. The submaxillary and cervical glands are a little swollen. The breath of such patients has generally a bad smell, although the membrane does not extend very far; at all events, some smell will be perceived as soon as the membrane begins to macerate or fall off; especially is this the case when the throat is not kept clean. Such are the average of mild cases, and the great majority of all those which come under observation in the onset of an epidemic. They will get well in five, six, or eight days; some spontaneously, some after appropriate treatment. The membrane will be removed as a whole, and leave the mucous membrane underneath smooth, livid; or it will macerate, fall off in pieces, or be removed as a half serous liquid, and leave the mucous membrane, especially of the tonsils, with a ragged appearance and superficial ulcerations. At the same time, the submaxillary and cervical glands will return to their normal size.

A number of cases occurred during the epidemic, in which all the symptoms were present, with the exception of the formation of the membrane; there were some amongst them in which the symptoms of fever and adenitis, and even a general adynamic condition, were well pronounced. In such cases we never thought of putting the case down as diphtheria, but recorded it as pharyngitis, amygdalitis, or stomatitis; a number of cases which we, according to the severity of symptoms, supposed to be of a diphtheritic nature, we put down as diphtheritic pharyngitis, or diphtheritic fever; the former name being selected for such cases in which the symptoms of pharyngitis prevailed, the latter for such as showed fever as their foremost symptom. We were seldom mistaken, as in a day or two membranes would generally present themselves.

There is a form of the diphtheritic process, in which very little or no fever is perceived, and little or no glandular swelling will take place. The congestion and swelling of the pharynx is not very remarkable, and the first remarkable appearance is noticed on the follicles of the mucous membrane of the pharynx; they are visible as whitish grey spots of a twentieth or twelfth of an inch in diameter. Not long after, however, membranes are formed, and the whole process will run its course in sometimes three or four days, without any great inconvenience to the patient. But there are cases in which the symptoms will increase in severity, fever will set in, and submaxillary and cervical adenitis take place. Such cases have been separated by some authors as "common membranous angina," as "herpes of the throat," as "herpetic angina." We do not see anything else in these cases but light diphtherite, mostly without well pronounced general symptoms. We have not found any more reason to distinguish this form, of which, however, we have not seen more than a dozen of cases, from diphtheria, than we should think of excluding a case of scarlatina, without fever, and with less than usual eruption, from the record of cases of scarlatina. Moreover, we have pointed to the fact that such apparently simple cases will sometimes be followed by fever and adenitis; and when we further add that some of these light cases of "herpetic angina" have been followed by diphtheritic paralysis, we ought to lay aside our fondness for classification and subdivision; and take nature as a whole, the different pathological conditions of the diphtheritic process are variable in their appearance but alike in their innermost nature.

The local process of exudation is not confined to a certain limit. Membranes will be found on the posterior wall of the velum, and in the posterior nares, blocking up the nostrils and extending as far down as the lips. In

such cases small children, who are mostly used to breathe through the nose, suffer much from dyspnoea. These membranes will be removed in the course of time, and with the same consequences as those of the pharynx itself. To one peculiarity, however, we wish to direct the attention of our readers. We have once seen, in consultation, a little girl of five years, in the upper part of the city, with extensive membranes of the pharynx, velum, etc., but were struck with the fact that long cylindrical tubes of false membrane were brought up. These cylinders could come from the trachea only; how was it that the child was not suffering all the time from the utmost dyspnoea, but felt proportionately not bad and gave, in its general appearance, a good prognosis? We learned from our friend, Dr. S., who was then suffering from extensive diphtheria himself, that he, too, had brought up cylindrical tubes of membranes like those thrown off in children suffering from laryngeal and tracheal diphtherite, but that in his case they came from the posterior nares. We desire to state this fact, supposing that some professional man might in some case have the same difficulty in explaining the occurrence of cylindrical tubes of membrane that do not come from the respiratory organs.

In other cases the exudation of pseudo-membrane will extend downwards, instead of upwards, and will then constitute what is generally called croup. The diagnosis of this descending croup is difficult in one respect only, viz. The oedematous swelling surrounding the membranous exudation will sometimes produce croupous cough and dyspnoea, etc., before the membrane has reached the larynx, by oedema of the epiglottis, or glottis, or general laryngeal catarrh. As a general thing, there is not much practical difference, for in the majority of such cases the process is of such rapidity, that we need not wait long for real membranous exudation. At all events, the symptoms of this descending croup of the diphtheritic process are the same as are known in genuine or sporadic croup; and therefore, after we have learned besides, that the anatomical elements and constitution in diphtheritic membranes of the pharynx and larynx is the same, we have a right to say, that there is no real, anatomical difference between "diphtheritic" and "genuine" croup. We need not return to the consideration of the former assumption of a difference between croupous and diphtheritic membranes. It does not exist. Croupous membranes were those which were stretched over the mucous membrane, while the name of diphtheritic membranes was given to such as would be imbedded in the membrane and leave ulcerations, or loss of substance, when removed. There is no such difference.

A boy of eight months, of Norfolk street, under the care of Dr. Krackowizer, who had been suffering from whooping-cough for four weeks came under observation in January, 1860, for bronchitis, high fever, and light pharyngeal diphtherite. Five days after, the membranes were gone, and bronchitis and fever had subsided. After five more days the urine was observed by the mother to color and stiffen the linen. It was viscid, of normal quantity and color, and became a thick solid mass of coagulum after being exposed to heat. No blood corpuscles under the microscope, but a large number of epithelial cells of the kidneys. Within two days the amount of albumen decreased decidedly, but fever rose again, and new exudation was visible in the pharynx; after two more days croupous cough and hoarse voice; death on the next morning, produced by exhaustion; the dyspnoea not being considered grave. The post-mortem examination revealed membranes in the pharynx, on the posterior surface of the soft palate, on the superior surface of the epiglottis—an exceedingly rare occurrence—and in the larynx. Two sisters, of five, and one and a half years, were both affected, in January, 1860, with pharyngeal diphtherite, accompanied with high fever and cervical adenitis. Both recovered for a while, the youngest one in a shorter time than the other. Fever and membranes disappeared, nor did any symptom remain, except a somewhat livid appearance of the mucous mem-

brane of the pharynx and nostrils. About three weeks after the first attack the youngest child was again affected; fever and cervical adenitis reappeared; so did a thick, solid, white membrane on the left tonsil. The general symptoms remaining as they had been, the membrane extended to the posterior wall of the pharynx, right tonsil, uvula and velum, and upwards to the nostrils and lips, and down to the larynx. The child died a day after the larynx had commenced to be affected, and but three days after the first onset of this second attack of diphtheria. This case was the more remarkable to us as it was the first under our observation of descending diphtheria terminating fatally by suffocation. We are sorry to say, that this case had its equals since. A boy of three years, in Avenue B, suffered from diphtheria; membranes, cervical adenitis, and fever. In the same degree as the membrane extended upwards, it found its way downwards too, to the larynx, so as to threaten death from suffocation. In spite of the general fear of performing tracheotomy in descending and febrile "diphtheritic croup," and supported by the successful operation on a similar case in a boy of five years, performed by Dr. Gay, of Boston (Bost. Med. and Surg. Jour. 1859), we performed the operation. On the following day the membranes had not only extended in the pharynx and mouth, but the external wound, too, was covered with diphtheritic membrane. In this case the diphtheritic process was of such obstinacy, that we had to wait seventeen days, because of the impermeability of the larynx, before being able to remove the canula.

Here, then, are three cases of "diphtheritic" croup. One shows the symptoms and anatomical lesions of "genuine" croup, is operated upon, and gets well. Another of the same nature, diphtheria preceding for weeks, terminates fatally from suffocation. We could report the case of another girl, of seven years, in the upper part of the city, in whom diphtheritic membranes and general symptoms of diphtheria preceded the laryngeal diphtherite for more than a week. The dyspnoea rendered tracheotomy necessary, but the membranes descended so far into the bronchial ramifications, and were of such toughness and thickness, that cylinders and shreds of an inch in length could be brought up from the bronchi by means of a forceps. The child died from suffocation. Another case, we have reported, ended fatally from exhaustion, not, however, from suffocation, nor from poisoning of the blood by carbonic acid. And here is all the difference, as shown in some few cases, between "genuine" and "diphtheritic" croup.

There have certainly been cases of croup, genuine croup, differing widely from each other, in the experience of every one of our readers. The differences are either of an individual or of a general nature. The former do not interest us here, the latter do. Genuine croup is apt to cause death either by suffocation, or by poisoning with carbonic acid; and "diphtheritic" croup may show a third and fourth cause of death, viz. exhaustion, and diphtheritic poisoning. And it is here that we wish to add some remarks on the true nature of diphtheria, as shown by observation and rational conclusions.

Diphtheria is a general disease; it has local deposits, it is true, but in the same manner that scarlatina will localize itself on the skin, mucous membrane of the Belfinian canals, etc., measles on the skin, mucous membrane of the respiratory organs, etc., or typhoid fever on the mucous membrane of the intestinal tract, etc. Thus diphtheria will, being eminently a constitutional disease, localize itself on the mucous membranes and denuded skin in general, and on the mucous membrane of the pharynx and larynx in particular. Therefore, the danger of the disease depends by no means on the extension or thickness of the exudation, sometimes a very small amount of exudation taking place in extremely dangerous cases. Some cases have set in with an exceedingly high fever; with vomiting, which so generally is a symptom of sudden and general affection of the system; with convulsions, like those observed at the outbreak of acute exanthema, and with rapid collapse not at all explained by any of the visible symptoms. A healthy and

robust boy of four years, residing in Chrystie street, complained of some pain in swallowing, and appeared languid and sleepy. It was in the autumn of 1857, and no epidemic of any kind was prevalent at that time in the city. The child did not appear to be very sick, there were very few local symptoms in the throat, a little tumefaction of the tonsils, no particular oedematous swelling, no unusual degree of local hyperæmia, but several small patches of membranes on either tonsil. Pulse ninety, feeble. The patient had a moderate temperature of the skin; extremities not cold; skin felt rather dry and flabby. The child was listless, indifferent to anything around, took some food as a matter of course without longing or asking for it. No local pain anywhere except a slight uneasiness on pressure exercised on the tonsils; bowels rather constipated. The patient answered questions intelligibly, but indifferently and slowly. Pupils reacting to the light, no cerebral symptoms whatever, except the slowness of mental function alluded to. No diagnosis possible besides that of local pharyngeal diphtherite, as we had seen no case of general diphtheritic affection of the system at that time. No particular change on the next day, nor on the third; with only the exception that the child grew more and more indifferent, listless, and melancholy, cared little for anything that was done to rouse or ease him, and appeared to have no desire for, nor objection to, anything. The pharyngeal membranes had extended somewhat, but not over a surface of more than two-thirds of an inch in diameter; no progress downwards, no affection of the respiratory organs, no dyspnoea. No appreciable change had taken place on the morning of the fourth day, with the exception the general adynamic condition of the patient was increasing. It kept increasing, the child nevertheless taking some food, and uttering a few words now and then, answering questions, retaining apparently the full degree of his intellectual faculties. The general temperature diminished, the child went on sinking more and more rapidly, and when we returned in the afternoon he was dead, quiet to the last moment; no dyspnoea, no perceptible cause of death—extinction of life like a fire slowly extinguished from want of fuel. Post-mortem examination gave but negative results. No organ abnormal; only general anæmia. What little blood was in the body appeared rather thin, and of dark color. No diphtheritic membrane on any part of the body except in the pharynx.

Although not all the fatal cases ran their course with this entire absence of positive symptoms, terminating in death as it were without disease, a great number of cases have come under observation, in which the local exudations were by no means in proportion to the general symptoms and to the character of the attack. Excessive fever, with a pulse of 140, 150, 180, like that in scarlet fever, but generally of a more adynamic character, and large swellings of the submaxillary and cervical glands have in a large number of cases been observed to precede the exudation of fibrinous membrane for three, four, even five days. Then, at last, membranes would make their appearance, and either cover, in some instances, the pharyngeal mucous membrane and the adjoining parts to a large extent, or, in most cases, remain for a time of moderate size. Such cases are never without danger; the adynamic character of the disease, combined with the intrinsic danger of a fever like that described, being fully able to produce death from exhaustion in a very short time indeed. Such have been those cases also in which a septic character would develop itself. Instead of being removed as a whole, or in pieces, the membranes would decay, macerate, or flow off, with the serous secretion of the adjoining mucous membranes, as a thin sanious matter, of watery color, and excessively foul smell, and would exulcerate every healthy part it came in contact with. Ulcerations, on the original seat of the membranes, or such as were successively formed on neighboring localities by contact with the sanious, foul secretion, would again prove the seat of new secretion and stench, and sometimes require many weeks, even months,

in such individuals who suffered most from anæmia and exhaustion, to perfectly heal. We will here refer particularly to those cases of which a large number have been observed. In a family where diphtheria was just reaping its harvest, or in the neighborhood, children would fall sick with all the initial symptoms of diphtheria, excessive fever, exhaustion, pharyngitis, and adenitis, but no membranes would appear. The whole would take a course like that of diphtheria, and the patients require a long time to recover. Such cases we have always put down as diphtheritic fever. We feel sure, however, that they were entitled to be named diphtheria like those in which membranes were formed. Similar cases will occur in other epidemics, where part of the symptoms only will be fully developed, without however losing their general character; there is a great difference, too, among cases of scarlatina in every epidemic, according to individual nature, accompanying circumstances, and the severity of original infection or contagion. Further, there is a great difference depending on whether a case of zymotic disease will occur sporadically, or during the height of an epidemic; sporadic cases, and such as occur at the commencement of an epidemic, generally proving to be milder forms. Thus diphtheria, in sporadic cases, or in the beginning of the epidemic, may look like a merely local disease, being in its nature a general affection of the system. Diphtheria with its local exudation into the larynx has, for many centuries, generally been observed sporadic, and therefore has been taken to be a merely local affection. It has been otherwise in our epidemic. At all events we believe we have shown that pharyngeal as well as laryngeal diphtheria may have the appearance of either a local alteration or a constitutional disease; its true nature being general and constitutional, like scarlet fever, or any of the diseases comprehended under the head of zymotic affections. At this point, finally, we allude to the real meaning of the terms of "diphtherite" and "diphtheria." According to its origin the former means a local, the latter a general affection. If a uniform name was to be given to all the cases occurring, both sporadically and epidemically, it could be that of diphtheria only; but such cases as exhibit more of a local character, might as well be called pharyngeal, laryngeal, cutaneous, etc., diphtherite.

We have a few more words to say on the swelling of the submaxillary and cervical glands. It is a symptom that will be found in almost every case, and never missed in any severe one. It is so certain to be met with, and so little, in many cases, in proportion to the extension of the membranes, and, moreover, so generally keeping pace with the danger of the fever, that we have been taught to consider the amount of glandular swelling, accompanying pharyngeal diphtheria, as a highly valuable prognostic symptom. It will often remain after the other symptoms have subsided, but the case must not be considered to be perfectly safe as long as the glandular swelling or induration lasts. Suppuration of the diseased glands we have met with in but very few cases. We consider the glandular swelling as a means of determining the amount of constitutional infection.

The epidemic nature of the disease is an acknowledged fact; consequently we do not wish to carry owls to Athens by repeating what every reader knows. Nor is it necessary to say much on the communicability of the disease by endemic influences. For every practitioner who has but seen a limited number of cases, has certainly learned, that cases will seldom occur isolated in one locality. Generally, a number of inhabitants of the same room, house, or neighborhood, will be affected at the same time, or in short intervals. Thus hospital wards containing cases of diphtheria, will soon exhibit a number of other cases of the same disease. This fact has been so often reported, and is so well known, that this source of infection need not be dwelt upon any longer. But the question arises, whether many cases believed to be the result of the same general endemic influences, exercising their power on every inhabitant alike, have not rather been the consequences of direct contagion.

This question of the contagiousness of diphtheria has been the stumbling-block of most writers, and we must confess, of some of the most conscientious ones. For certainly the more scrupulous an author would be, the more he will feel bound to restrict the territory of contagion in all cases that give a chance of being explained by endemic influences alone. For our own part, we at once state our conviction of the contagiousness of diphtheria. We know full well that the proof thereof is not easy. Inoculation has proved either fruitless or improbable; the cases of surgeons related to have been directly affected by diphtheritic patients, admit of other explanations; the vast majority of cases believed to be, and reported as proofs of contagiousness, are really better explained by local, endemic influences. But we know of instances of contagion like the following, few though they be: A lady in Hudson Street, in this city, in whose house, or neighborhood, was no case of diphtheria, went to see a family in the eastern part of the city several times, while this part of the city exhibited a great number of cases of diphtheria, and in the very same family some children were affected. She even stayed there for a whole day, in company with a baby. The consequence was, that herself, and her baby, and two other children at home were affected in the course of a week. In this instance no case proved fatal. But Dr. D. has communicated to us the very similar fact, of importation of diphtheria from the Battery to Varick Street, where the disease had not occurred before, with the result of the disease eventually proving fatal to several children in the same family. From a very limited number of such occurrences we have a right to conclude that diphtheria may be propagated by direct contagion. We do not mean to say that it necessarily must be communicated to everybody coming in contact with a patient—although we have repeatedly observed such members of a family as were most engaged in waiting upon those already affected, to be the next sufferers—just as little as we assert that the like endemic cause existing in a room, or house, or neighborhood, must necessarily strike down every human being under its influence. Nor do we think, that no case of diphtheria could originate in any other way except by contagion. But we feel sure, that it partakes of the nature of such epidemic diseases as typhoid fever, or scarlatina, or measles. The failure of experiments is no proof; for when has the direct experiment on the contagiousness of typhus, scarlatina, and measles, or on their inoculability, given any satisfactory result? And nevertheless, although there are some who deny contagion by typhoid fever, all three are recognised to be propagated by direct communication from one individual to another. The diphtheritic membranes, moreover, observed to form on the sore nipples of mothers or wet-nurses, whose children suffered from diphtheria, appear to be as good a proof that contagion is a cause of diphtheria, as any that could be found in any other disease.

The complications of diphtheria are very numerous. Nothing else can be expected in a disease, which is as apt to last a long time as it will generally impair health and nutrition for a protracted period. We do not count coryza, croup, etc., mere localisations of the disease, amongst its complications, nor shall we have anything to say on hemorrhages occurring during its course until we enumerate its final consequences; nor do we feel sure whether we are right in considering pneumonia with its rapid exudation as a mere accidental complication. For it is certain, that pneumonia will very often occur during the diphtheritic process, and may easily be influenced by the peculiar constitution of the blood giving rise to rapid and copious fibrinous exudation. It is well known to all of our readers that croup will oftentimes be complicated with pneumonia, and even prove fatal not by its own influence but by the sudden and extensive propagation of the exudative process to the bronchi and lungs. Whichever opinion may be right, it is certain that pneumonia is very frequently met with in company with diphtheria. We have further noticed as complications, of more or less accidental nature,

several zymotic diseases, as scarlatina, measles, urticaria, furunculosis, erysipelas, intermittens, and intermittent cephalalgia, varioloid, and acute rheumatism; further, general anemia, paralysis (pre-existing), rachitis, pulmonary tubercles, eczema of the face, dysuria, stomatitis aphthosa and ulcerativa, gangrene of the throat and noma; gastric, intestinal, and gastro-intestinal catarrh, laryngeal catarrh; dilatation, and hypertrophy, of the heart; hyperæmia of the brain, and meningeal cedema. Many of these complications are very dangerous and frightful indeed. We have attended a young man of nineteen years, residing in Chrystie Street, in whom the pharynx and nostrils were the seat of diphtheritic membranes; adenitis and fever being in the beginning very moderate. The membranes were hard and thick, and proved very obstinate for some weeks, until, in February, the patient was affected with varioloid. From this time the strength of the patient gave way, the fever rose, appetite disappeared, mucous membranes grew pale, skin very inactive. The usual time of desquamation passed by, but no desquamation took place; the scurfis grew hard and dry and gave a great deal of pain on being touched; at the same time they increased in height and diameter, so as to urge upon us the necessity of removing them by force. Beneath each of them the surface was a deep discolored ulcer, secreting a whitish yellow or greenish pale matter from a whitish grey membrane that covered the ground. Thus each varioloid pustule constituted a diphtheritic ulcer, a hundred of which covered the head and face and trunk and extremities of our unfortunate patient. It may suffice to say, that he required several months before the diphtheritic ulcers of his scalp and face got well, and that he has not recovered his former strength and health up to this moment. Now, that such complications of two zymotic diseases should occur is not at all improbable, nor are they very rare. There are many cases, in which we should do well to remember that a complication of scarlatina and measles, or of measles and urticaria, form a compound that is sometimes met with in practice, and is very apt to mislead the practitioner, and to be misconstrued by him. Nor is it an entirely extraordinary occurrence to see an acute exanthema step in before another has fully completed its course. Thus we have the case of a child, on whom we were fully able to diagnose, to our entire satisfaction, the presence of scarlatina, urticaria, measles, and finally varioloid, in the course of thirty-two days from the first to the last attack.

Not an unfrequent complication of diphtheria is albuminuria, which may be observed in any stage of the disease. It is not at all true, that albuminuria in diphtheria and in scarlatina shows the difference pointed out by French writers, viz. that albuminuria is a complication of the first stage of diphtheria, and of the later periods of scarlatina; this assumption being equally erroneous in either of the two. About a quarter of all the cases examined for albuminuria gave a positive result as to its presence, and nearly all the post-mortem examinations revealed an hyperæmic condition of the kidneys; this being the first cause of, or at least coexistent with, albuminuria. Thus it appears that albuminuria, although found in many cases of no severity, nor sometimes attended with any danger, is a complication of more than average importance. A boy of eight years, a resident of Washington street, Hoboken, N. J., died in general clonic convulsions, lasting for eight hours; no strabismus being present, and the pupils exhibiting some very slight reaction to the light almost up to the point of death. Patient had never before been seen by the physician, and died before a diagnosis could be made. We could learn from the parents but a very few facts pointing to a preceding disease; the boy had been in the street, as usually, the very last day of his life, apparently healthy, but was reported, suggestive questions being put, to have been without his usual good humor for the last six or eight weeks, without his usual appetite, and to have complained of pain in swallowing for a few days, some six weeks before his death. Moreover, some slight glandular

swellings were perceived in both submaxillary regions, which helped to give us the impression that death was in this case produced by renal affection consequent on diphtheria. For we have repeatedly found that even considerable tumefaction of the glands leaves proportionately but slight signs after death. The urine taken from the bladder, which contained a large amount, proved to be loaded with albumen. The lungs were normal, but exceedingly oedematous; heart anæmic, containing solid fibrinous coagulations; liver anæmic, showing some fatty degeneration; spleen anæmic and friable; left kidney exceedingly hyperæmic, blood flowing from the first incision, without any pressure being resorted to; right kidney in the same hyperæmic condition, containing a quantity of mucus in each of the calices, and an abscess of the size of a coffee-bean in the medullary substance; each of the tonsils, and the velum palatinum, and the posterior wall of the pharynx contained deep ulcerations, some of two-thirds of an inch in diameter, and some more superficial ones still lined with diphtheritic membranes. A boy of a little more than two years, residing in Chrystie street, N. Y., suffered, when we were first called to see him, from extensive pharyngitis, considerable bilateral glandular swelling of the submaxillary region, and a high fever. Our diagnosis of diphtheritic fever was confirmed on the next day by large membranes covering both tonsils and part of the uvula. No albumen. Patient got well in eight or nine days, the membranes having disappeared, and the glandular swelling and fever subsided. We left the patient, after having examined his urine, not finding albumen; nor did we see him before three days afterwards, when chancing to pass the house. The boy was reported to have been well and lively, and to have slept well all the time, but appeared feverish. A dose of sulph. chin. was prescribed to be taken late in the afternoon. At 4 A.M. next morning we were sent for; the child had been in general clonic convulsions for two hours, and breathed his last on our entering the room. He was reported to have passed no urine since we left him, grew more and more feverish and restless, finally quiet and soporous, until he was taken with convulsions. The urine we took from the bladder was strongly albuminous. A boy of two years, residing in Fourth Avenue, suffered from diphtheria, complicated with acute rheumatism of the knee and foot-joints, but not with albuminuria, for several weeks of the last fall, and recovered his usual strength and liveliness towards the close of the year. In the middle of January, 1860, he was again affected with diphtheritic fever, slight membranous exudations on the tonsils, great prostration, and bronchial catarrh. All these symptoms subsided in four or five days; the boy again smiling, talking, eating, and enjoying himself in the open air. On the evening of the sixth day acute pulmonary oedema made its appearance, with all its subsequent symptoms, and death ensued at 1 P.M., on the following day. The post-mortem examination revealed: General anæmia, extensive bilateral cedema of the lungs, miliary tubercles in the inferior lobe of the left lung, fatty degeneration of the liver, Bright's disease and albuminuria. A girl of three years, residing in Seventh Avenue, affected with pulmonary tubercles and fatty degeneration of the liver, who had been consequently anæmic and feeble for a long time, fell sick with diphtheria, and suffered for a number of weeks with it and albuminuria. Finally, blood and pus to a large amount appeared in the urine. The strength of the child was kept up as much as possible, the renal functions were particularly taken care of, antifebrile and antiseptic treatment was resorted to, and the child got fairly over one of the most fearful attacks of the disease we remember to have observed. No convulsions ensued during the whole course of the disease.

This latter case we have alluded to in order to show that even the worst cases of diphtheria complicated with albuminuria, besides general diseases of old standing, must not necessarily be despaired of; and further to point to the actual importance of albuminuria in itself. If the presence of albumen in the urine was the real and only cause of the

fatal result, we could hardly conceive that this last case recovered while the others terminated fatally; but we seek the cause of death, consequently, in the suppression of renal secretion, so generally found together, in renal hyperæmia and consecutive degenerations of the kidneys, with albuminuria; and more particularly in the absence of urea in the urine, for it is well known that a large amount of urine may be excreted through the kidneys, and nevertheless urea retained in the blood as cause of death. At all events, however, we have, from what we have learned, a right to conclude that albuminuria is a grave complication under all circumstances. We have sometimes seen it not followed by any dangerous consequences; but, again, have found several cases of consecutive paralysis, after apparently light cases of diphtheria, to be preceded by albuminuria, thus being led to believe, that the grave result of the disease was connected with the presence of albumen in the urine during its course. We have no doubt that albuminuria complicating diphtheria points always to a deep and thorough alteration, more so than in scarlatina, where the complication is the local result of scarlatinous affection of the Bellinian canals, and that it is of more importance and attended with greater danger in diphtheria than in scarlatina.

We conclude these remarks on albuminuria connected with diphtheria by alluding to the fact, that albuminous urine has been found in a number of diseases which show but one common symptom, viz. hydræmia. If any disease has a great and rapid influence in impoverishing the blood and increasing its relative amount of water, it is diphtheria. Thus the rapid change in the endosmotic functions of the kidneys, together with the frequent, either general or local, diminution of nervous power, may account in many or the majority of cases, for the appearance of albumen in the urine of patients suffering from diphtheria. This latter supposition would be confirmed, also, by the above-mentioned fact, that some apparently benign cases of diphtheria, in whose initial stages albuminuria had been found, have terminated in either general or local paralysis or paresis. Besides, the post-mortem examination of the boy dying from pharyngeal and laryngeal diphtheria, complicated with diphtheria, shows the manner in which albuminuria may affect the secretion of urine and the general condition. The kidneys, in that case, were firmly enveloped in their capsules, and hyperæmic, and offered no abnormal appearance on microscopical inspection. But under the microscope the epithelia of the kidneys were all as it were inflated, enlarged, and of a somewhat less distinct appearance. Thus the Bellinian canals were compressed.

(To be continued.)

THE confidence inspired by the presence of Paré, enabled the garrison of Metz to keep the city until the gallant army that lay around it perished beneath its walls. The heroic courage of Desgenettes, in attending upon and touching the infected, and even inoculating himself with the plague to show its non-contagiousness, restored the prostrate energies of the French army in the East, under Napoleon, which had sunk, utterly disheartened, beneath the mere name of this terrible scourge. After the bloody battle of Eylau, Napoleon, in passing, found the eminent Larrey standing in the snow, under a slight canopy of branches, engaged in dressing the wounded; on again passing the same place, at the same hour, next day, he saw the indefatigable surgeon still occupied as before. Thus had Larrey spent twenty-four hours uninterruptedly, except in the few minutes snatched for a hurried repast! What finer display of benevolent zeal is upon record?—*Dr. W. C. Roberts' Eulogium of Medical Science.*

IODINE AS A DISINFECTANT.—Bionet says, that the foulest sores may be rendered entirely free from offensiveness by applications of tincture of iodine.

Reports of Hospitals.

PENNSYLVANIA HOSPITAL.

[Service of Dr. HARTSHORNE.]

FRACTURES.—1. A MIDDLE-AGED laboring man had just been brought in, with an injury by the falling of a bank of earth upon his leg. When his boot was cut off, it was ascertained that he had suffered a fracture of the leg at the ankle, together with much displacement of the bones. These were reduced, the fragments adjusted, and the leg placed in a box, with the usual house application of a mixture of lead water and belladonna. A singular circumstance connected with the case was the fact that the limb was covered with small fragments of glass. Dr. H. took occasion to remark upon the finding of such things, and the occasional difficulty to account for their presence. The mystery was soon solved by examining the boot, when portions of a glass bottle were found in it, put in, according to the patient, "to keep the cold out, and fill up" (the thermometer at 90°).

2. A small boy with compound fracture of the skull from the kick of a horse, admitted one week ago. The seat of injury is just above the right eye. The bone was bared, and a large fissure produced in the external table, yet not a bad symptom had occurred. It had been merely dressed with isinglass plaster, and the patient kept absolutely at rest.

3. Fracture of the middle third of the clavicle. This man has been placed in bed on his back, and Fox's apparatus (the one generally used in the house) applied. This consists of a padded collar or ring placed around the arm at the shoulder of the sound side, and a sort of sling in which the elbow of the injured side is placed; by straps this sling is attached to the collar; a pad under the axilla completes the dressing.

DISLOCATIONS.—Two cases of displacement of the acromial extremity of the clavicle were next exhibited. In one the parts were retained in place by a sort of dressing, the prominent point in which was a tourniquet, the strap of which was placed beneath the elbow, while the screw was fastened directly over the acromial portion of the clavicle, cotton having been employed to prevent injury by the pressure. This, though certainly a novel apparatus, answered the indication perfectly. The other case had been treated by position on the back in bed, and was doing well.

INJURY OF THE EYE.—The eye of this man had been injured by a stick which perforated the cornea, and wounded the iris. The aqueous humor had been partially discharged into the tissues surrounding, and there was a prolapsus of the iris. The seat of injury was so covered by the projection of the conjunctiva that it was impossible to reduce the displacement. Atropia 2 gr. to aqua f3i was dropped into the eye to cause dilatation of the pupil. In these cases the best, and often the only treatment required, is to keep the eye perfectly at rest. This is accomplished by closing both eyes by means of the isinglass plaster. This patient shows every evidence of approaching mania-a-potu, and must be carefully watched. Should this set in, the sound eye had better be permitted to remain free, as such patients are liable to be more terribly affected when unable to see.

ABSCESS OF THE ABDOMEN.—1. This man presented an unusual form of disease. He had been admitted six weeks ago, with a tumor of the abdomen, seemingly full of air. After three weeks it opened, and discharged much matter and gas. This would have led to the supposition that some connexion existed between the abscess and the bowels, but as no pus was found in the stools or urine, this could not have been the case. It is always found that the contents of abscesses situated in close proximity to the intestines or bladder, by a process of exosmosis from those cavities assume the fetor and other qualities of the urine or fecal matter.

This affection arose from a contusion. It requires nothing more than application of a wash of zinc sulph. gr. ij., alumin. gr. x., aq. f3i, warm fomentations occasionally, care, and good diet.

2. A similar case was next exhibited; the abscess was discharging freely, and required the same treatment as above.

BELLEVUE HOSPITAL.

DEATH FOLLOWING INHALATION OF CHLOROFORM.

[Reported by ALEXANDRE RIVER, Jr., M.D., Acting Senior Assistant.]

On the morning of Aug. 1st, 1860, at or about 10.45 A.M., I was requested by Dr. Mason, acting house-surgeon of the first surgical division, to administer chloroform to Michael Lanahan, preparatory to the operation of circumcision. Patient was forty years of age, and complained of nothing but a chancre under the prepuce. I accordingly proceeded to administer the chloroform on a napkin, pouring out small quantities at a time, and allowing a space of from one half to one inch to intervene between the patient's mouth and the napkin, so that there might be a free admixture of atmospheric air with the anæsthetic agent. I observed, at first, nothing unusual in the behavior of the patient, his respiration was natural, his pulse was good, and he soon exhibited the usual symptoms of muscular action which precede anæsthesia. The whole amount of chloroform thus far employed could not have exceeded an ounce and a half, and a large portion of this must have been lost by evaporation. After I had administered the chloroform four or five minutes I was startled by a sudden stertorous expiration, and immediately removed the napkin entirely. This was the first intimation that I had of the patient's being so nearly fully anæsthetized. For nearly a minute the patient continued to make stertorous expirations followed by regular inspirations, and I regarded these phenomena as nothing more than signs of the full anæsthetic influence; in a moment, however, after a long stertorous expiration he did not inspire. We immediately alternately compressed the thorax and allowed it to dilate by the resiliency of its walls, and in this way the patient continued to respire for a short time—occasionally missing one or two inspirations, and afterwards taking a long one; occasionally, also, he would take a deep inspiration unassisted by artificial respiration, though his pulse could not at this time be felt at the wrist. We now gave him brandy and a solution of carbonate of ammonia, both by the mouth and by injection. But, finally, after a stertorous expiration he ceased to breathe altogether. Dr. Mason auscultated his heart, but no sounds could be heard. We rolled him on his side and then back again, after the plan of Marshall Hall, and also employed the galvanic battery to the chest and the nape of the neck, occasionally putting the two poles over the origin and insertion of the thoracic muscles. A tube was passed into the trachea by Dr. Peugnet and the lungs inflated with the bellows; meantime the extremities were rubbed by assistants, and artificial respiration was continued. A tenaculum was inserted into the tongue, by which means it was drawn forwards and held in this position so that the air might have free access to the lungs. At the expiration of an hour and ten minutes the extremities had become quite cold, the pupils were widely dilated, the eyes fixed, the pulse for more than an hour had not been felt at the wrist, nor had the heart sounds been heard, and though the air could be heard rushing in and out of the throat it was evident that this was only mechanical. With the concurrence of one of the visiting physicians, who was present, all efforts to revive him were discontinued.

Post-mortem examination twenty-eight hours after death.—Present Drs. J. R. Wood, Van Buren, Gouley, Meier, Green, and others. Weather warm, rigor mortis moderate, better marked in the lower than in the upper extremities; body

well nourished; post-mortem congestion upon the posterior part of the trunk and upon the head and side of the face; chancre on the glans penis; prepuce oedematous; abdomen tympanitic; dark blood escaping from the nose and some frothy mucus from the mouth. *Head*:—The calvarium being removed the dura mater was found normal; subarachnoid effusion enough to fill the sulci of the brain; on both hemispheres small patches of old lymph; superficial cerebral vessels congested; small amount of bloody serum in the lateral ventricles; brain otherwise healthy. *Thorax*:—Lungs collapsed; each pleural cavity contained about eight ounces of serum stained with blood; about two ounces of serum in the pericardium; otherwise both the pleura and pericardium were healthy; heart *soft and flabby*, and upon microscopical examination found to have undergone *fatty degeneration*; weight ten ounces; muscular tissue of right side appeared of the natural color; auricle and ventricle were opened but contained no clot; valves healthy, the muscular tissue of the left side also appeared of the natural color; the auricle and ventricle of this side were also opened but contained no blood clot. The valves healthy and of a bright color; one or two patches of atheroma upon the mitral valves. Both lungs were found congested throughout, particularly the posterior portion; in the right lung there were some apoplectic clots in the upper and lower lobes; left lung also contained an apoplectic clot as large as a filbert in the lower lobe; both lungs were oedematous and less crepitant than usual. *Abdomen*:—Small amount of bloody serum in the cavity; kidneys large and weighed about eight ounces each, and both healthy apparently; capsules more adherent than usual; both kidneys were somewhat congested. *Spleen* as large again as usual, but natural as regards consistency. *Liver* healthy, weight about five pounds and somewhat congested. *Stomach* presented a patch of congestion near the cardiac extremity close to the oesophageal opening. There was also another patch of congestion near the pyloric orifice. *Intestines* were inflated with gas, otherwise healthy. *Bladder* firmly contracted.

NEW YORK HOSPITAL.

POISONING BY STRYCHNINE.

THE following case, communicated by Dr. S. S. HARRIS, the Resident Physician, is of interest:—Thomas W—, set. twenty-eight, a native of New York, had been on a debauch for several days, and while under the influence of liquor attempted suicide by taking ten cents worth of strychnia. About half an hour after, convulsions came on, beginning with slight twitches in the muscles of the lower extremities. When brought to the hospital, about an hour after swallowing the poison, he was suffering from violent convulsions every few minutes; pulse ninety-six, rather small, and very irregular; face of a dusky hue; body warm, but hands and feet rather cool. An emetic of sulphate of zinc and pulv. ipecac was immediately administered, which operated freely. Sinapisms were then applied to the whole length of the spine, and 3ss tr. assafoetidae administered every half hour by enemata. This treatment was continued for two hours, when the convulsions entirely ceased, but the patient was much prostrated, with some tendency to collapse. Stimulants were then cautiously given, and he soon rallied. For a day or two the patient had slight gastritis, but on the third day after admission he was discharged cured. Some pains were taken to ascertain the exact amount of poison he swallowed, and without doubt it must have been *six or eight grains*. A similar case occurred in the hospital a few months before, when the patient took *seven grains*, and yet recovered. Judging from these two cases, the strychnia must have been either very much adulterated, or else it sometimes takes larger doses to kill than is generally supposed. This is a fact which it would be well to bear in mind in medico-legal investigations.

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Communications should be addressed "Office American Medical Times, 440 Broadway, N. Y." BAILLIÈRE BROTHERS, Publishers and Proprietors.

American Medical Times.

SATURDAY, AUGUST 11, 1860.

FEVER HOSPITALS FOR THE CITY.

IN a former article we ventured to assert that "New York has no Sanitary Defences worthy the name." It is true that we have a Municipal Health Department, and a "Sanitary Squad,"—constituting the internal sanitary system, and costing the city a full half million annually, but really doing nothing to diminish the rate of mortality, and prevent the propagation of disease: while a Quarantine Health Officer and a Floating Quarantine Hospital for Yellow Fever—constituting the only external sanitary defences—though characterized by honest administration, are, under existing circumstances, necessarily incompetent to an effectual defence of the city from imported diseases.

Acting without concert or system, subject to a fluctuating policy, in subserviency too often of partisan or mercenary ends—the Sanitary Defences of the city and port of New York are sadly inefficient and ineffective. As we have remarked on a former occasion, a suitable Code of Hygiene, and an intelligent, faithful Board of Health, are urgently demanded for the sanitary improvement of the city.

But in this age of legislative corruption and bargaining it is quite uncertain whether an improvement in Health Laws for this city can be obtained. And such are the necessities of the people, such the jeopardy of life and health as well as of commercial interests, that our population cannot safely await the good time coming, when good laws and municipal reform shall effect the sanitary improvements now demanded. From various quarters the question comes up—"What shall be done?" The Chamber of Commerce, with a keen discernment of the interests of trade, have for more than a twelvemonth been repeating the inquiry, and during the year its Committee on Quarantine Regulations have made a valuable report on that subject; and at its meeting last week Mr. Opdyke submitted the following resolution:

"Resolved, That the Committee on Quarantine be directed to inquire and report as to the best means of placing the quarantine regulations of this port on a more perfect and efficient basis—a basis that will render them less onerous to commerce, more effective in protecting this city from contagious diseases, and that will make better provision for the care of the sick."

He offered this resolution, he said, in view of the fall-

ure of the legislature to make an appropriation for Quarantine, and the conflict of interests and jurisdiction on that subject. The legislature refused the appropriation on the ground that it was the business of the city, and the city refused because the state had the matter in charge. Thus it is seen how dangerously impracticable it is to await the action of the legislature to effect the work now imperatively demanded for the public safety.

On Thursday last, the Superintendent of the Emigrant Depôt and Vice President of the Emigration Commissioners died of ship fever, contracted—not from ships nor freshly landed immigrants—but from fever patients that from day to day, for more than a month since their debarkation in apparent health from the ship "*Cynosure*," have been straggling into Castle Garden, or been brought to that rendezvous of immigrants, seeking a hospital or a grave. Other citizens will doubtless be smitten with the same infection from such poor immigrants in our streets, public conveyances, or the miserable tenements in which they are crowded.

Is such exposure of the sick to the well, unavoidable? Is it not criminal? The examining physician for the Emigration Commissioners informs us that he has already ordered to be sent to the Emigrants' Hospital on Ward's Island, *upwards of forty cases of ship fever*, that have occurred among the *Cynosure's* passengers, *many days subsequent to their debarkation* from the ship and dispersion among the human packing houses of the city. All these persons traversed on foot or otherwise the densest sections of our city, on their way to Castle Garden and the hospitals on Ward's Island. This was not accomplished without some risk to the population, and greater jeopardy to the poor patients themselves.

We do not refer to this by way of animadversion upon the management of the sick by the Commissioners of Emigration, for we would here state, that no other class of the sick poor in our city are so well provided for as the immigrant, under that Board of Commissioners; but we use these facts to illustrate the urgent necessity for an efficient medical and sanitary police in this city, and at the same time we desire to call attention to the fact that the city of New York, with its million of inhabitants, and a constant influx of foreigners unparalleled in any other city, has no Fever Hospital and no institution for the reception and medical care of contagious and infectious maladies.

Formerly all cases of infectious fevers which came under the direction of the Board of Health or the Commissioners of Emigration, were ordered to the Quarantine Hospital on Staten Island; but since the destruction of those hospitals, the Commissioners have provided for their sick by sending them to the Islands in the East River, while the city has made no provision except for small-pox. Providentially there has been an interim in the usual prevalence of infectious fevers, but preparation should be made for the proper care of such pestilential fevers as are liable to be introduced or propagated in this city. Fortunately for the sick of fevers among us, and happily for the progress of rational views and practices regarding the care of infectious and contagious maladies, the sick and the dying will never again be sent on long journeys through the streets of the city—first the Health Agent's or Commissioner's office, thence to some up-town pier, and thence after protracted and often fatal delays and a tedious passage, to the grand lazar house

at Staten Island. The green-knolled acres of the Quarantine Cemetery, with its thousands of coffins, five tiers deep, in close trenches, tell a mournful tale of the unwise and inhuman policy that, until the conflagration at Quarantine, consigned all classes of infectious fevers to that remote institution. We need not enter upon further details, for this fact is sufficiently significant of the truth on this subject, that from the days of Campbell Stewart, Stirling, Doane, and Vaché, the successive chief physicians of the Quarantine Hospitals have strongly denounced such tedious transportation of the sick and dying as inhuman to the patients, and injurious to the public.

Nature has provided three beautiful islands just on the Eastern margin of this great city, and there, unmolested and unapproached, in widely insulated hospitals, fanned by the freshest breezes, the sick with any of the infectious diseases occurring in this city should be placed, excepting only such cases as may not safely be removed from the lower and more distant wards of the city.

A FEVER HOSPITAL and House of Reception for infectious diseases, is urgently demanded for the timely reception of persons who may be attacked with such maladies in the dense population of the tenements, hotels, and boarding houses of the lower wards.

To the Commissioners of Charities, and to the Board of Health, we must look for the accomplishment of this object, as well as of that equally important work of preparing suitable places for fever wards on the islands of the East River. The cost of such preparations would be more than re-im-bursed to the municipal treasury in consequence of a diminution of that pauperism which arises from untimely deaths and the spread of infectious fevers.

Increased facilities for the care of the sick and the control of exotic infection are required at Quarantine; but what our Quarantine establishment is, and what it should be, must be discussed at a future period. The time has arrived when it is far more important to provide Fever Hospitals in and near the city than at Quarantine. But let us have no hospitals unless they can be flooded at will with fresh air and sunlight. The world has seen enough of folly in hospital architecture providing for the indiscriminate and dangerous aggregation of the sick with light and air shut out, thus insuring the perpetuation of fever poisons and a high death rate. Let the authorities prepare—on Ward's Island—one or two plain and properly constructed fever hospitals, and also provide a sufficient number of airy and properly located reception and fever wards within the city, and it may safely be predicated that all the infectious and contagious fevers will not only be kept in certain abeyance, but that the percentage of deaths from such fevers among us will be reduced fifty per cent. The Hospitals at Quarantine should be used exclusively for the sick arriving from sea. And if those Hospitals are to be re-established at some new location, let them never be used for the sick of our cities.

THE WEEK.

A DEATH by chloroform is this week reported in our columns from Bellevue Hospital. The anæsthetic was administered by a junior member of the house staff, with as much care as is usual in hospital practice, and commendable exertions were made to resuscitate the patient. The post-

mortem examination revealed fatty degeneration of the heart, an apoplectic condition of both lungs, and slight evidences of former inflammation of the meninges of the brain. This is the second case of death by chloroform which has occurred in that hospital within a twelvemonth. Considering the daily use of anæsthetics in this large hospital, and the immense aggregate of cases of its employment in a year, and, above all, the careless manner in which it is often administered, this exemption from fatal consequences is truly remarkable. We learn that this case has raised the question in the Medical Board of the propriety of using chloroform in the practice of that hospital. We believe that this agent was long since excluded from the New York, Pennsylvania, and Massachusetts General Hospitals.

NEW YORK is at last to have a model market. The new and elegant buildings known as Tompkins Market, near the junction of Third Avenue and Bowery, have been selected by the City Inspector as the scene of this important experiment. What internal arrangements are to be made in this market, and how the details are to be carried out, we do not know, nor are these questions of much consequence if they are to be determined by the present head of the Bureau of Markets. Until New York is blest with officials in this department who understand that the character of a market depends, not so much upon the architecture of its building, as the quality of the produce, and the ease with which it can be obtained by families, we have little to hope for in the way of reforming our market system.

A NEW county jail is about to be erected at the corner of Ludlow St. and Essex Market Place, and it is stated that "the windows will be so arranged that the cells will be well lighted and ventilated." In what manner this is to be accomplished we are not informed, but the intimation of an improved prison architecture is a cause of gratulation. If the law regards the prisoner innocent until he is proved to be guilty, we cannot understand on what principle of justice a citizen, *suspected* of crime, is to be immured (we might say interred) for months in the dank and loathsome cells of our present city prisons. Whoever has thrust his head into one of the cells of the Tombs and attempted to respire its stagnant and stifling atmosphere, can but regard such accommodations, for persons suspected of crime, as a stigma upon our civilization. Nor can we be surprised that prisoners, long subjected to these depressing and enervating influences, should occasionally commit suicide to escape the horrors of longer confinement. We trust that our new prison will be so constructed as to afford free access of light and air, the common bounties of a beneficent Providence, even to the confessed criminal.

THE friends of the late Dr. ISAACS will be gratified to learn that a bust of this lamented physician is in preparation by Mr. Thomas Cooper, of this city. The mould was taken after death, which gives a somewhat cadaveric appearance to the features, but otherwise they are strikingly accurate.

THE New York Medical College is reported to have reorganized, with twelve professors; course to commence Sept. 15, and continue six months, with four lectures daily. The following are the names of the Faculty, as far as selected: viz. Drs. Carnochan, Doremus, Reese, Gardiner, Budd, Raphael, and Bronson, of this city, with Dr. M. A. Pallen of Missouri, and Dr. C. C. Cox of Maryland.

Reviews.

ON OBSCURE DISEASES OF THE BRAIN, AND DISORDERS OF THE MIND: THEIR INCIPIENT SYMPTOMS, PATHOLOGY, DIAGNOSIS, TREATMENT, AND PROPHYLAXIS. By FORBES WINSLOW, M.D. Philadelphia: Blanchard & Lea. 1866. 8vo. pp. 576.

THIS is emphatically a book for the times in which we live. With an admitted and alarming increase of insanity throughout the civilized world, and with corresponding augmentation in the amount and variety of nervous diseases in particular classes of the population, the inquiry often arises in the mind of the physician, the philanthropist, and the political economist—Why this wide-spread ruin of intellect and this increasing waste of mind? Do the causes of insanity fall within the scope of scientific analysis and human comprehension, and can laws of prevention or palliation be successfully interposed? Until quite recently a prevalent tendency to dogmatic and confused metaphysical philosophizing, or, at the best, an exclusive and very limited pathology relating to mental disorders, very seriously hindered the progress of a more enlarged and rational philosophy of such disorders, and, at the same time, served to prejudice medical inquirers, as well as the moralist and the jurist, against the more thorough study of the subject of mental pathology and medical psychology. But thanks to such earnest inquirers as Conolly, Brigham, Bucknill, Ray, and Forbes Winslow, the professional and the popular estimation of this department of study now warrants the hope that great and humane reforms will speedily be effected in mental hygiene and in jurisprudential administration upon questions relating to unsoundness of mind. Who that has read the terrible records of the Bicêtre and Salpêtrière previously to the labors of Pinel and Esquirol; or who that knows the dark and awful history of the old madhouses of Bethlem, London, and York, previous to the labors of William and Samuel Tuke, Gardiner Hill, and Conolly, does not exclaim with devout gratitude, what humane reforms have science and Christian love wrought! To-day insanity is treated upon rational principles as a disease. The clanking of chains and manacles in dark cells of hopeless incarceration are no longer heard in Christian countries; the frenzied maniac is no longer treated as an incarnate demon, nor the unhappy victim of strange hallucinations driven to permanent insanity by the ridicule and cruelty of attendants. Medical skill, tempered with mercy and gentleness, as the healing art always should be, has achieved this wonderful change in the treatment of the mind diseased.

It will be recollected that Pinel was one of the most accomplished physicians and scholars of his time; and from the auspicious day when "with pity, goodness, and justice," that good physician entered the Bicêtre to establish the new dispensation of science and mercy, the noblest and most learned of our profession have been selected for the supervision and care of lunatic asylums. In these rapidly multiplying institutions, observations and careful study of mental and cerebral diseases have been carried on, until the prolific records of insanity demanded the labors of such clear and broad-minded men as Dr. Winslow to analyse and apply the results of such records. Engaged in the preparation of a treatise upon "Softening and other types of Organic Dis-

case of the Brain," our author found that the history of the "Incipient Symptoms of Obscure Diseases of the Brain, and Disorders of the Mind," constituted in itself a subject of such vast practical importance as to require a separate volume, adapted to the use of all classes of medical practitioners.

The design of the work is admirably adapted to an acknowledged want in our profession and in the literature of mental disorders. It is a treatise on the Semeiology of Insanity in its incipency and progress. The book is a spontaneous result of the investigation of facts carefully collated and inductively studied, and which give to the volume an affluence of illustration from real life never before presented in any treatise.

The first chapter is devoted to suggestions and illustrations relating to the importance of incipient symptoms, and the incipient stages of disease of the mind and the brain. We quote the following conclusion:—

"We should never lose sight of the fact, that no irritation or inflammatory action can exist for any length of time in the more important tissues, or ganglia of the brain, without seriously perilling the reason, and endangering life!

"How forcibly do these observations apply to the detection of the incipient symptoms of all types and degrees of mental disorder! It is a well-established fact, that *seventy*, if not *eighty* per cent. of cases of insanity admit of easy and speedy cure, if treated in the early stage, provided there be no strong constitutional predisposition to cerebral and mental affections, or existing cranial malformation; and even when an hereditary taint exists, derangement of mind generally yields to the steady and persevering administration of the repaeutic agents, combined with judicious moral measures, provided the first scintillations of the malady are fully recognised, and without loss of time grappled with by remedial treatment.

"A vast and frightful amount of chronic and incurable insanity exists at this moment, within the precincts of our county and private asylums, which can be clearly traced to the criminal neglect of the disease in the first or incipient stage."

In the subsequent chapters Dr. Winslow proceeds to analyse the rich stores of facts at his command, in the following order:—

1. Morbid Phenomena of Intelligence.
2. Morbid States of Motion.
3. Morbid Conditions of Sensation.

This classification of the subject fully recognises the three physiological functions of the cerebro-spinal system, viz.:—

a. Thought. β. Motion. γ. Sensation.

4. Morbid Phenomena of the Special Senses.

Viz.: 1. Sight. α. Touch.
2. Hearing. β. Smell.
3. Taste.

5. Morbid Phenomena of Sleep, and Dreaming.

6. Morbid Phenomena of Organic, or Nutritive Life.

Viz.: α. Digestion and Assimilation. γ. Respiration.
β. Circulation. δ. Generation.

7. General Principles of Pathology, Treatment, and Prophylaxis."

Under the first section is the following statement and classification:—

"I affirm, that in every case of disease of the encephalon, particularly if the organic change or pressure be established in the vesicular matter, or in the membranes immediately investing the brain, a disordered, or abnormal state of cerebro-psychical phenomena may, in the incipient stage, on careful examination, be detected.

"Having made these preliminary remarks, I proceed to the investigation of the first, or *psychical* section of the subject.

"The mind may be in a state of morbid—1. *Exaltation*; 2. *Depression*; 3. *Aberration*; 4. *Impairment*."

And under the head of Premonitory Symptoms of Insanity, are considered—

"1. *Anomalous and masked affections of the mind*; 2. *Stage of consciousness*; 3. *Exaltation of mind*; 4. *Depression of mind*; 5. *Aberration of mind*; 6. *Impairment and loss of mind*."

After devoting considerable space to the confessional narrations of persons who have been insane—illustrating at once the magnificence, the sufferings, and the morbid phenomena of the mind in ruins, the author proceeds to investigate the symptoms of *masked and unrecognised affections of the mind*. And he says—

"I presume it to be a generally admitted axiom that the mind may be *disordered* without being *insane*, using this phrase in its strictly legal acceptance. These conditions of morbid intellect may be considered by some as only degrees of *insanity*; but I would suggest that this term be restricted to those mental disorders, accompanied with positive loss of control, clearly justifying the exercise of moral restraint, and to those morbid conditions of the intellect which sanction an appeal to the protective influence of the law. In other words, I would confine my remarks to those cases in which the mind may be said to be *pathologically* disordered, but not invariably *legally* insane. * * *

"The subject under consideration is one, I readily admit, of extreme delicacy, but, nevertheless, of incalculable importance to all sections of the community. It is, I admit, beset with difficulties, and surrounded by dangers. In the hands of the inexperienced, the ignorant, indiscreet, and the wilfully designing, the facts that I have to record, and principles which I am about to enunciate, might be productive of much mischief; but, I ask, ought any apprehensions of this nature to deter the philosopher from entering upon so important an inquiry?

"The subject of latent and unrecognised morbid mind is yet in its infancy. It may be said to occupy at present, untrodden and almost untouched ground. What a vast field is here presented to the truth-seeking observer, who, to a practical knowledge of human nature, adds an acquaintance with the higher departments of mental and moral philosophy, as well as of cerebral pathology! How much of the bitterness, misery, and wretchedness, so often witnessed in the bosom of families, arises from concealed and undetected mental alienation! How oft do we witness ruin, beggary, disgrace, and death result from such unrecognised morbid mental conditions! It is the canker-worm gnawing at the vitals, and undermining the happiness of many a domestic heart. Can nothing be done to arrest the fearful progress of this moral avalanche, or arrest the course of the rapid current that is hurling so many to ruin and destruction?"

The illustrations and the lessons conveyed in these sections on masked or latent insanity are exceedingly convincing and practical, and most earnestly do the facts appeal to the medical profession as guardians of life and health, "as practical physicians called upon to unravel the mysterious and complicated phenomena of disease, and administer relief to human suffering, fearlessly to grapple with an evil which is sapping the happiness of families, and to exert their utmost ability to disseminate sound principles of pathology and therapeutics upon a matter so intimately associated and so closely interwoven with the mental and social well-being of the human race."

(To be continued.)

Progress of Medical Science.

INFANTILE PATHOLOGY AND THERAPEUTICS.

By A. JACOBI, M.D.

On the Connexion of certain Pulmonary Diseases with Primary Anomalies of the Costal Cartilages. By WILHELM ALEXANDER FREUND. With seven plates. (*Der Zusammenhang wisser Lungenkrankheiten mit Primären Rippenknorpelanomalien. Mit 7 Tafeln.* Erlangen, 1859.)—Formerly, it was considered to be a general rule that the viscera should be the causes of the configuration of the surrounding walls. In contradiction to this general belief, Virchow has pointed out, in the past few years, the importance of the tribasilar bone in shaping the brain, and some other facts, as, for instance, dilatation of the urinary bladder resulting from deficient contractility and chronic expansion of the abdominal walls. Intestinal catarrh, and the acute meteorism of hypochondriacs and hysteric women, from the very same cause, will also show that the walls are, in some single instances, known to have a great influence in forming the contents. Dyspnoea has been observed not only to follow extensive combustion of the skin of the thorax and contracting cicatrices, but to be sometimes the effect of the largeness and weight of the female breasts; some thoracic muscles, when paralysed, have been known for some time to impede regular respiration, and have, therefore, been the object of local galvanization; curvatures of the vertebral column may give rise to induration of the pulmonary tissue, suffocative catarrh, and have even been said to give immunity from tubercles; and some old authors, as Platerus and Swammerdam, ventured even to think of the influence cartilages might possibly have on the inclosed viscera. For it is true, and fully proved by our author, that healthy respiratory muscles, influenced by powerful nerves, will be powerless whenever their points of insertion, the ribs, are altered in their physical quality and mobility. The costal cartilages, particularly the first, have a great influence on the normal extension and motions of the ribs, and are the principal regulators of the expansion of the lungs and thorax; the latter of which is always, under normal circumstances, perfectly filled by the former.

The result of the author's investigations on the living and dead is this, that many cases of two very common pulmonary diseases have their first origin in a morbid condition of the costal cartilages, viz. 1st, the idiopathic, mostly hereditary, and in the majority of cases chronic tuberculosis, generally found first in the apex of the lungs; and 2d, the idiopathic emphysema, which is first found, generally, on the anterior superior margins of the lungs, is commonly observed to come on slowly and progress gradually, and is known to be sometimes hereditary. The morbid condition of the costal cartilages alluded to is their abnormal shortness, produced by premature ossification, which is sometimes a vitium primæ conformationis, and has been observed even during foetal life, but more generally an anomaly in the development of the infantile age, and is very apt, like other qualities and anomalies of the osseous system, to be propagated by inheritance. As well in the commencement as in later stages of pulmonary tuberculosis, in cases having their seat first in the apex of the lungs, Dr. F. has found the first costal cartilage to be badly developed, particularly as to length, so much so, that its length was reduced to 2 centim. 2 mill., while the normal measures are the following:

Length of the first costal cartilage in the male, 2c. 3m.; in female, 2c. 1m.			
" second "	4c. 3m.	" "	5c. 9m.
" third "	4c. 3m.	" "	4c. 6m.
" fourth "	5c. 3m.	" "	5c. 1m.
" fifth "	6c. 3m.	" "	5c. 9m.
" sixth "	8c. 3m.	" "	5c. 3m.
" seventh "	19c. 2m.	" "	19c. 2m.

We add at once, that deficient development of the second and third costal cartilages has fully the same influence as abnormal shortness of the first on the function of the thorax. It is their shortness principally that produces the *habitus phthisicus* of authors. According to the seat of premature ossification of the costal cartilages, Dr. F. makes the following distinctions: 1. Primary symmetric stenosis of the superior part of the thorax; 2. Primary asymmetric stenosis of the superior part of the thorax; 3. Primary stenosis of the middle part of the thorax; 4. Immobility and loss of function of the superior part of the thorax, by exterior ossification of the first costal cartilage, which has, besides, been shortened before. This process is observed in the first cartilage only, begins in its superior anterior part, and progresses to its posterior side, and thus enveloping the normal cartilage with an osseous covering, impedes mobility and torsion. This latter anomaly has been taken to be the result of the inflammatory processes inside the thoracic cavity. But such is not the case, as it always begins in front of the cartilage, is observed where no pleurisy has ever been met with, and a long time before any symptom of tubercles can be discovered; the *habitus phthisicus* and deficient capacity of the lungs preceding the deposition of tubercles and the development of phthisis for many years. Shortening of the second and third cartilages is most unfavorable; the superior part of the thorax undergoing its fullest and most rapid development after the years of puberty, and the general development suffering largely from any disproportion, tuberculosis is most frequent between sixteen and thirty years of age. Inspection, palpation, and mensuration will prove sufficient to make a correct diagnosis of the said anomaly; the akidopeirastio method of A. Th. Middeldorff (examination by means of a quickly introduced needle to learn the general condition as to hardness, etc.) will, as it is easy to be applied, support those named before. Our author has examined eleven cases in which tuberculosis was cured. There were cicatrices in the apex, and other signs of former inflammations, and calcareous tubercles, while the remaining tissue was either normal or emphysematous. The cure was effected by spontaneous formation of a false joint in the junction of the first costal cartilage and the manubrium sterni; by the rupture of the firm ligaments mobility being increased, respiration easier, and oxygenization of the blood improved. Wherever perichondritis of the first cartilage is observed, it requires the utmost care, like pulmonary congestion itself. Leeches, mercury, iodine, proper diet and posture, and absolute quiet are indicated, in order to prevent osseous deposits. (Older authors recommend, in many cases of tubercular phthisis, issues on the arms, and even the application of the actual cautery.) Appropriate gymnastic exercise, strengthening of the respiratory muscles by local Faradisation, with particular care not to increase congestion, omission of any kind of stimulant nutriment, etc., etc., are necessary. Resection of ribs and costal cartilages has been performed many times for surgical purposes; but it is uncertain whether the first costal cartilage could be safely separated from the sternum, the more so, as all the operations alluded to give rise to pleuritic exudations.

The idiopathic pulmonary emphysema is the result of other pathological changes of the costal cartilages. From about the sixteenth year up to old age, sometimes in apparently healthy, sometimes in decrepid individuals, all the costal cartilages show a dirty yellow color, and become looser in their structure. This rarefaction of the cartilaginous tissue is combined with increased size of the cartilage. The last effect of this alteration is well described by the author as a "partially progressive," and a "general immovable dilatation of the thorax." Emphysema is the real consequence of the lungs being closely adjoining the dilated thorax. At the same time, the triangular muscle, by its attempts to effect the expiratory movements of the thorax, is immensely increased in size. These latter changes may be found in early life, and thus emphysema is apt to be, also a hereditary disease.

Reports of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

Dr. GEO. WILKES, President, in the Chair.

JAN. 29TH, 1880.

DISCUSSION ON DIPHTHERIA.

(Continued from page 88.)

Dr. ALLIN stated that since the last meeting he had met with another case of diphtheria, which he still had under treatment. A week ago, Thursday (June 26), a little German girl complained of a sore neck. These symptoms continued until the following Tuesday, when she experienced difficulty in swallowing. Her mother resorted to various domestic remedies, but to no purpose. The day following she was seized with a fever, which, along with the dysphagia, increased very much in severity, and I was sent for. I arrived in the afternoon about five o'clock, and found the patient very much prostrated; the pulse was 130 per minute and weak; breathing was rapid and somewhat labored, and there was considerable dysphagia present. I immediately had the child taken up, and on examining the throat found both tonsils covered with the diphtheritic membrane, the uvula was slightly cedematous, and the pharynx was lined as far down as I could see. The examination was made with much difficulty, as it seemed to give the child a great deal of pain. I gave the citrate of quinine and iron, with brandy and beef tea internally, using locally Labarraque's solution. I saw the child again the next morning, and found that the upper portion of the tonsil was less covered with exudation than it had been, but in other respects no change in the general symptoms was noticed. The treatment was continued, and at my visit in the afternoon I found still less of the exudation, and the pulse was more full and rapid. I then suspended the use of the citrate of iron and quinine, and ordered instead the spirits of mildererus with an excess of ammonia, continuing the beef tea and brandy. I also recognised that the case was complicated with pneumonia of the left side, which had passed into the second stage without the knowledge, on my part, of its existence before. This morning (Saturday), about four o'clock, I found the child suffering from croupy symptoms, and on inspection of the throat I discovered that the exudation had almost entirely cleared off, only showing itself upon the epiglottis. I then stopped the sp. mind. and gave a grain of calomel every hour, and continued the rest of the treatment. At eight o'clock that morning I visited the case again, and at that time in company with Dr. Bloodgood. We decided to continue the administration of the calomel and give quinine along with it. This afternoon about three o'clock I saw the child again, and found that the parents, thinking that the child was going to die, had discontinued the treatment about two hours before. There was very great difficulty in breathing, the air seemed to come through a perfectly dry tube, and at the end of two or three jerking sort of expirations, an inspiration would follow. I then told the father to give the child every fifteen minutes the syrup of ipecac until free emesis should follow. He did so. I called there just before I started to attend this meeting, and learned that in the interval three separate pieces of membrane had been expelled by vomiting, and that the patient in consequence felt very much easier. The last directions left with the father were to repeat the administration of the remedy in the hope that some more of the exudation might be removed. The pneumonia has extended into the other lung, and there is now marked tubular breathing on both sides of the chest. Dr. A., in conclusion, mentioned that there was no scarlet fever in the family.

Dr. BULKLEY stated that he had seen, within the last five years, four well marked cases of diphtheria, two of which had occurred within the last two months. All these were connected, indirectly, with scarlet fever.

Dr. MCCREADY stated that he had seen within two or three months two cases of diphtheria, which were by no means very severe, although in both instances they occurred in very unfavorable subjects, they being of a marked strumous diathesis. The first child had a large patch of membrane on but one tonsil, the pulse was frequent, there was a good deal of soreness of the throat, and also some swelling about the glands of the neck. The severity of the disease was broken in a couple of days, the membrane commenced then to disappear, and at the end of the fifth day was gone entirely. The convalescence was slow but perfect. In the second case the membrane existed on both tonsils, and the mode of its disappearance was the same as in the other case. The treatment in both consisted in the administration of the tr. mur. ferri in doses of three or four drops every two hours, together with wine whey, and good regimen.

Dr. WILKES stated that he had seen three well marked cases of this disease, and all of them were quite severe, and quite characteristic. He did not think it was possible to confound it with croup or the ordinary sore throat.

Dr. BUCK gave the following particulars of twelve cases of diphtheritic croup which he had met with since 1849. All these cases were children from three and a half to ten years of age; seven were males, and five were females; three were attacked in Oct., three in Nov., and one in each of the following months: Dec., Jan., Feb., March, April, and May. Of the twelve four recovered and eight died. Of the eight that died, six were tracheotomized; of the four that recovered, none were operated upon. All the twelve were unequivocal cases, and were complicated with laryngeal symptoms; with but two exceptions, the exudation was seen in the fauces, and upon one of these tracheotomy was performed. This patient, a young child, survived twenty-three days after the operation, and the wound, together with a blistered surface which existed before the operation, became covered with diphtheritic membrane. In all, the early symptoms were those of sore throat, preceded in some instances by chilliness and fever, then followed by cough and the ordinary croupy symptoms. Those that were tracheotomized survived from thirty-six hours to twenty-three days, and all of them died in consequence of the extension of the disease into the air passages. In the child that survived the longest, there were convulsions complicating the case, and at the autopsy, there were discovered traces of the existence of pleuro-pneumonia. In all that recovered calomel was given, and the nitrate of silver was applied locally. In two of them the cinnabar fumigations were used in addition. In answer to a question from Dr. Bulkley, Dr. Buck stated that in all his cases the disease extended to the larynx and gave rise to croupy symptoms, and he was inclined to group them under the general head of diphtheritic croup.

Dr. MCCREADY could not see where the dividing line could be drawn between diphtheria and croup. We discover a patch of yellowish membrane upon the tonsil, pharynx, and velum of a child who has a little sore throat, and is slightly feverish. The fever increases, the child begins to have difficult deglutition, and too soon the alarming symptoms of croup show themselves. That train of symptoms may last from three or four days to a fortnight, but how they can be distinguished from a case of diphtheria, I am at a loss to determine. They seemed to him to be the same disease.

Dr. WATSON was of the opinion that diphtheria was croup, if the membrane extended into the larynx and gave rise to croupy symptoms.

Dr. BUCK thought that the particular character of the disease depended upon a more or less inflammatory diathesis at different seasons of the year.

Dr. CLARK stated that about one-half his fatal cases died in consequence of the effects of the disease upon the general system, and not of any mechanical obstruction. He had

seen since the last meeting, three more cases, and of these one recovered. One was peculiar in certain respects, and bears upon the question whether or not this disease has any relation to scarlet fever. This patient was eight years of age. On the 3d of January the family physician was called, and on examination of the throat discovered the existence of membranous matter upon the fauces, and he anticipated all the unpleasant results of its extension. The local treatment consisted in the application of nitrate of silver, together with five grains of quinine twice a day. In the course of four days the membrane became loosened and was removed by the forceps. At that time the disease showed no tendency to extend. Within twelve hours after, symptoms which finally ended in scarlet fever came on, and the throat during all that time was very sore. Recovery was commencing in the usual way, when the patient was seized with a new set of febrile symptoms, and in two days after, the full, irregular crescentic eruption of measles made its appearance. The measles took its usual course, and on the subsidence of the eruption new patches appeared on the fauces. On the 3d day after, this membrane reappeared, and I was called to see the case; then the fauces were covered; a broad patch of exudation which concealed the surface of the velum to a considerable extent, and also the tonsils, extended into the posterior nares, and forward so far that it could be seen in the nostrils. The physician had previously removed from the last-mentioned place, with a pair of curved forceps, long ribands of membrane. In a sort of vomitive effort, the child threw up a large quantity of tough, leathery membrane. During all this time there was no marked obstruction to the respiration. When I saw the child, however, the respiration was exceedingly rapid, there was a moan at each inspiration, the pulse 140, and the surface and nails were blue. I predicted an unfavorable issue, notwithstanding there was no appearance of any membrane in the larynx. The evidence of poisoning of the blood became more and more apparent, the blue appearance of the surface continued, and in two days after she died. In the meantime the membrane had made its appearance upon a little sore on the lip, and had extended from it as a centre, a considerable distance over the surrounding apparently healthy tissue. The case is interesting when we take into account the fact that with this diphtheritic diathesis upon her, this girl went through scarlet fever and measles, had a very sore throat during the prevalence of the former disease, yet there was no diphtheritic membrane; and as the convalescence from measles was commencing the exudation appeared, and the disease progressed to a fatal termination without any serious obstruction to the air passages. In answer to a question from Dr. Elliot, Dr. Clark stated that he had met with no case that had terminated in convulsions.

(To be continued.)

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, JUNE 13, 1860.

DR. M. KRACKOWIZER, PRESIDENT, IN THE CHAIR.

SUCCESSFUL TREATMENT OF SPINA BIFIDA.

DR. W. DETMOLD presented to the Society the person of a child, ten years of age, upon whom he had operated for spina bifida some few weeks after her birth. He thought the case to be a remarkable one, inasmuch as the result was successful. He saw the child the first time since the operation about a week ago, when she was brought to his clinique for some affection of the eyes. On examination of the parts which had been the seat of the disease, it was found that the bony cleft in the spinal column had entirely closed, there only being at that point a deficiency of the spinous processes. The skin covering the parts looked very much like the cicatrix of a burn. The spinal tumor, at the time of the operation, was about the size of half a hen's egg. In

addition to the trouble in the back, there was a peculiar malformation about the neck, which the Doctor thought to be dependent upon muscular contraction, the result of the same condition of things which gave rise to club-foot, a deformity of frequent occurrence in connection with spina bifida. The head seemed as if placed directly upon the shoulders, the chin was drawn down forcibly upon the sternum, the platysma myoides was very much enlarged, and the usual prominences occasioned by the sterno-cleido mastoid were entirely wanting, while the little space between the head and shoulders behind, was occupied by the broad expansion of the trapezius muscle. The Doctor stated that he operated upon cases of spina bifida by repeated punctures, generally two of these at a time. The case presented was the only one he had seen where an operation had been successful. A great many years ago he saw a case that was operated upon by a distinguished surgeon of this city. The operation was thought to be a success, and the tumor in due time contracted and felt solid. The surgeon thinking that the tumor had entirely consolidated, and the cleft had closed, removed the mass, when the child died within twenty-four hours afterwards. In connexion with the subject in hand, he stated that he had met with a case of successful cure of chronic hydrocephalus in much the same way. He had punctured some twenty or thirty cases for that disease, and, until a couple of years ago, he supposed that all had proved fatal in their results. At that time a woman came with a hydrocephalic child wishing to have the head punctured, and reminded him of the case of her own child who had recovered from the same disease as the result of such an operation performed some three or four years before. He stated that he had a specimen in the College Museum where the operation of puncturing had been performed twenty different times, that number of scars being distinctly seen in the dura mater. I find, continued he, that in performing this operation, the fluid escaping is at first perfectly clear, it then gradually becomes opaque, and then of a yellowish color, when the little patient very soon dies. We generally, in puncturing serous cavities, are afraid of the entrance of air. I recollect distinctly when it first occurred to me. I expected when I heard the air bubbling into the cavity that violent convulsions would occur, but to my astonishment no unpleasant effect whatever was produced. I have had the same thing occur to me several times since, and with the like result. It is true the children die afterwards, but the cause is not the entrance of air into the arachnoideal cavity. An English surgeon by the name of Conquest, states that he succeeded by simple puncturation in curing some thirteen out of twenty cases of this disease—such results do not coincide with my experience.

Dr. Post stated that he had only operated two or three times in spina bifida. His patients did well after two or three such operations, but soon after they gradually sank and died.

Dr. DALTON asked Dr. Detmold if, in the case presented, he recollected the existence of paralysis.

Dr. DETMOLD, in reply, stated that he had never seen paralysis in any case of spina bifida.

Dr. Post remarked that paralysis of the lower extremities was spoken of as a very frequent concomitant of spina bifida.

Dr. KRACKOWIZER had never met with a case of paralysis in that affection, except as the result of inflammation of the part which was the seat of the disease.

Dr. Post had seen several cases with club-feet, a condition of things that was allied to trouble in the cord.

Dr. DALTON remarked that paralysis must be at times connected with the disease, inasmuch as in occasional cases the spinal cord was deficient; in one case that came under his observation, the nervous trunks terminated upon the surface of the cyst.

Dr. KRACKOWIZER stated that in some cases the spinal cord might be intact while there was a simple deficiency of the osseous canal, but he believed that in the greater number of cases there was hydrorachis.

Dr. DETMOLD was under the impression that the terms *spina bifida* and *hydrorachis* were synonymous.

Dr. KRACKOWIZER gave it as his impression that Rokitan-sky made a distinction between the two; that *spina bifida* was merely a disease of the osseous canal, there being no tumor present, while in *hydrorachis* there was an undue accumulation of fluid either in the cavity of the arachnoid, or in the centre of the spinal cord itself. In the former instance, where the fluid was merely in the arachnoidal sac, the cord itself might be intact; if, on the other hand, the accumulation was in the centre of the cord, as the quantity of fluid increased the cord was proportionately distended until such time as the nerve fibres were separated from each other and crowded against the *dura mater*, which membrane, in turn, became distended, forced itself through the cleft in the bony canal, and, along with the integument covering it, formed the walls of the sac.

Dr. DETMOLD stated that according to that view all the cases that he had met with were instances of *hydrorachis*, for he had never seen any where there was no watery tumor present.

Dr. POST remarked that there were certain cases in which there was said to be a simple collection of fluid outside the cord, then again where special nerves were found in the sac, and lastly, cases in which a portion of the spinal cord itself was found in the swelling. He thought that the distinctions referred to by Dr. Krackowizer were unnecessary, the only difference consisting in the fact, that in one case the effusion was internal, and in the other external.

Dr. DETMOLD was under the impression that Pathologists regarded the accumulation of fluid as the primary cause, the cleft being the result of the same; certainly the result of the treatment in the case exhibited showed such a connexion between cause and effect. He had never seen a case of internal *hydrorachis*.

Dr. CLARK asked Dr. D. in what manner the children died in those cases of *spina bifida* which were operated upon.

Dr. DETMOLD replied that death generally was the result of inflammation of the coverings of the cord. He noticed that the same trouble followed puncturing for *hydrocephalus*. In proportion as the operations were repeated the serum became turbid, and, as before remarked, when the fluid showed a yellowish tinge, death ensued. In the specimen of that case where the operation was performed twenty times, the last puncture made, and the one of which the child died, was seen to be surrounded by effused blood, while the *dura mater* in the neighborhood was very much injected. In two or three cases of *spina bifida*, complicated with *hydrocephalus*, which were operated upon by him, death took place within thirty-six hours from convulsions. He was disposed to refer such a termination of life to collapse, as there was not a sufficient amount of time allowed to start up the requisite amount of inflammation.

Dr. CLARK, by way of corroborating the statement made by Dr. Dalton, in reference to the deficiency of some part of the spinal cord in cases of *spina bifida*, remarked that he could refer to more than one such case; that Cruveilhier had given, in his *Pathological Anatomy*, two illustrations where that condition of things existed. Dr. Clark thought that in those cases, as a matter of course, there should be a deficiency in the nerve power.

Dr. BUCK referred to the case of a child now six years old, where the disease *spina bifida* had existed since birth. The tumor was situated in the lumbar region; the integument covering it was not changed from any of the surrounding parts except that it was a little corrugated. In that instance there is an evident deficiency of nervous power, as shown by an habitual slow, and somewhat tottering gait. The tumor has never been operated upon.

Dr. DETMOLD knew of one such case where the tumor was left untouched, and the child only reached the age of five or six years.

Dr. KRACKOWIZER stated that there was a case reported in *Virchow's Archives* of a man who died of meningitis, the result of a blow on the back, and where, at the post-mortem

examination, there were evident the remains of *hydrorachis*.

General Correspondence.

CHLOROFORM IN PUERPERAL CONVULSIONS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The four following cases of puerperal convulsions were treated in a somewhat different manner from the routine of the books, and as the result has been favorable they may present some points of interest. Most authors agree, I believe, in recommending depletion in this disease, continuing it even "*ad deliquium animi*." There are doubtless many cases demanding this plan of treatment, but the question arises; Is not blood-letting viewed as the *sine qua non* to successful result, and is the disease not viewed as a *simple apoplexy* and treated strictly as such without sufficiently studying the concomitant circumstances, and duly considering the supersensibility of the spinal system of nerves?

Case 1 was a young woman, aged 17, about to be delivered of her first child. The labor was natural and promised a speedy termination, when a pain ushered in a convulsion; with every pain a convulsion occurred until all consciousness ceased. *Treatment*.—I applied cold to the head, administered chloroform on the threatened advent of every fit, in order to modify its severity, and prevent any lesion to the brain; hastened the delivery of the child and placenta. The convulsions ceased after expulsion of the contents of uterus. Twelve hours after birth of child the mother realized, for the first time, the event. Recovery rapid.

Case 2.—A woman of decided nervous temperament, the mother of several children, called upon me to relieve her severe headache and partial blindness. I found her between the seventh and eighth month of pregnancy, restless, wakeful, and apprehensive of impending danger. I applied cold to the head, administered *assafoetida* and Hoffman's anodyne, put the feet in mustard water. After an interval of twelve hours, finding no abatement and believing convulsions impending, I reviewed the forty-eight cases of puerperal convulsions reported by "Lewis," and resolved to bleed "*ad deliquium animi*." There was temporary relief, succeeded in a few hours by an increase of symptoms, and a convulsion accompanied with stertorous breathing and total unconsciousness; administered chloroform by inhalation until the spasm abated; repeated it whenever much restlessness was observed, or a renewal of convulsions anticipated; ordered enema of *assafoetida*, also administered *assafoetida* by mouth. Consciousness returned in eight hours with a cessation of all unfavorable symptoms, and by a persistent course with sedatives, she went her full time and gave birth to a healthy child.

Case 3.—A delicate Irish girl, in her seventh month, overfatigued herself on a very hot day. I found her complaining of blindness, specks floating before her eyes, intense headache, etc. Ordered ice to head, and mustard to feet, with sedatives internally, which relieved her. After the interval of a day I was again called. The same remedies again gave relief for a few hours only, when convulsions occurred with increasing severity and frequency until all consciousness ceased. *Treatment*.—Chloroform, and internally *tr. veratri viridis* and *assafoetida*. After the tongue became much lacerated and the power of deglutition stopped, I administered by enema a strong decoction of ergot, and dilated the os uteri, when a contraction of the uterus was followed by the expulsion of the fetus. Insanity succeeded for a few days followed by convalescence.

Case 4.—A lady, in her ninth month of pregnancy, was seized with a convulsion preceded by headache and partial

blindness, etc. Having been similarly affected with a former child, and relieved, she trusted to her memory for treatment without consulting me. The convulsions soon became frequent and severe, attended with much laceration of the tongue and stertorous breathing, succeeded by entire insensibility. *Treatment*.—Administered chloroform, ruptured membranes, dilated the os uteri, administered a strong infusion of *ergot* by *enema*, and when pains became manifest, turned the child and delivered by the feet. Convulsions ceased after the womb was emptied. Insanity continued for ten days, when convalescence was established.

C. S. STILWELL, M.D.

SAG HARBOR, N. Y.

CORRECTION.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I notice an error in my report of a case of enchondroma of the thigh, published in your Journal of the 14th ult. The patient is said to have recovered, whereas he died of phlebitis about four weeks after the operation. Please make the necessary correction, and oblige,

Yours truly,

WILLARD PARKER.

87 EAST 19TH STREET, July 31st.

Medical News.

AMERICAN PHARMACEUTICAL ASSOCIATION.—The Eighth Annual Meeting of this association will take place in the city of New York, on Tuesday, the 11th day of September next, at three o'clock P.M.

THE PHARMACEUTISTS of Philadelphia have agreed upon the following hours of opening their stores on Sunday, viz. —in the morning until half-past nine o'clock; in the afternoon from one to three o'clock; in the evening from nine to ten o'clock.

A HOMOEOPATHIC SCHOOL has at length been organized in this city, under a charter from the State. The following is a list of the text-books to be used:—Anatomy—Wilson, Gray, Morton. Physiology—Kirk, Dalton, Carpenter. Chemistry—Graham, Regnault, Kane. Toxicology—Taylor, Christison. Medical Jurisprudence—Wharton and Stillé. Materia Medica—Hahnemann. Practice of Medicine—Laurie, Herring, Marcy. Obstetrics—Churchill, Ramsbotham, Meigs, Velpeau. Surgery—Velpeau's Operative Surgery (Mott), Erichsen, Skey, Ferguson, Gross, Paget's Surgical Pathology. With the exception of the works on Materia Medica and Practice of Medicine, the Faculty have evinced good taste in the selection of text-books.

RHODE ISLAND MEDICAL SOCIETY.—At the Annual Meeting of this Society, lately held at Newport, the following officers were chosen:—*President*, Dr. Charles W. Parsons, Providence. *1st Vice President*, Dr. Henry E. Turner, Newport. *2d Vice President*, Dr. Jarvis J. Smith, Chepachet. *Recording Secretary*, Dr. Edward A. Crane, Providence. *Corresponding Secretary*, Dr. Geo. P. Baker, Providence. *Treasurer*, Dr. Geo. L. Catlin, Providence. *Censors*, Drs. David King, Newport; Otis Bullock, Warren; Geo. L. Collins, Providence; J. H. Eldridge, East Greenwich; Wm. G. Shaw, Wickford; Sylvanus Clapp, Pawtucket; J. W. C. Ely, Providence; Chas. H. Fisher, Scituate. *Orator for next Annual Meeting*, Dr. Edward A. Crane, Providence; *Substitute*, Dr. Edwin M. Snow, Providence.

REPORT OF THE DISPENSARIES of the city of New York for the month of July, 1880:—

	New York Dispensary.	Northern Dispensary.	Eastern Dispensary.	Donlit Dispensary.	N. Western Dispensary.	Grand Total.
Number of male patients.....	1,594	708	742	1,075	463	4,582
Number of female patients.....	1,724	1,080	1,100	1,295	624	5,773
Totals.....	3,318	1,788	1,842	2,370	1,087	10,385
Treated at dwellings.....	563	256	267	663	303	2,152
Treated at dispensaries.....	2,755	1,532	1,475	1,707	784	8,203
Primary vaccinations.....	86	73	25	23	5	172
Re-vaccinations.....	1	2	5	21	0	30
Whole number vaccinated.....	87	75	30	24	5	201
Number of adults.....	2,506	1,095	770	1,154	527	5,992
Number of children.....	812	718	1,072	1,216	556	4,365
Number of native patients.....	1,001	769	1,007	1,303	801	4,481
Number of foreign patients.....	2,317	976	835	1,167	586	5,871
Number sent to hospital.....	569	19	11	89	9	700
Number of deaths.....	28	8	31	84	6	97
Prescriptions dispensed.....	7,446	3,814	4,247	4,870	2,960	21,137

During the month of July, as above shown, medical and surgical services, vaccination, and medicine were afforded gratuitously to 10,385 persons. The principal causes of death were cholera infantum and consumption.

GENERAL REMARKS.—In the Eastern District remittent and continued fevers were increasing.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 28th day of July to the 4th day of August, 1880.

Deaths.—Men, 101; women, 75; boys, 171; girls, 150—total, 497. Adults, 176; youths, 12; children, 309; males, 272; females, 225; colored, 6. Infants under two years of age, 202. Among the causes of death we notice:—cholera infantum, 89; congestion of brain, 14; infantile convulsions, 25; diarrhoea, 25; dysentery, 9; scarlet fever, 15; typhus and typhoid fevers, 7; inflammation of brain, 22; of lungs, 18; of stomach, 12; small-pox, 4; consumption, 54; dropsy of head, 16; infantile marasmus, 40; infantile debility, 7. Classification: brain and nervous system, 93; respiratory, 99; digestive, 194. The number of deaths compared with the corresponding weeks of 1855 and of 1859, and of last week, was as follows:—

Week ending August 7, 1855.....	697	Decrease.....	189
" " August 4, 1859.....	625	".....	199
" " July 23, 1860.....	504	".....	7

JULY and AUG.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	"	"	"	"	"			
29th.	29.94	.26	67	61	72	5	8	SE.	9.5	.90
30th.	29.70	.11	78	70	83	5.7	6	NW. SW.	6	
31st.	29.71	.10	79	70	85	11	15	NE. to W.	2.5	
1st.	29.91	.20	70	60	77	12	16	NW. NE.	0.1	
2d.	30.04	.04	78	68	80	12.5	17	NE. SE.	0	
3d.	30.00	.08	73	67	78	7	14	SE.	3	.04
4th.	29.90	.18	77	70	83	5.5	8	SW.	7	.20

REMARKS ON THE WEATHER.—29th. Damp, variable. 30th. Damp, wind light, calm mid-day. 31st and 1st. Nearly calm. 2d and 3d. Fine; wind light, A.M., fresh, P.M. 4th. Very sultry, wind light; hard thunder-storm at night.

MEDICAL DIARY OF THE WEEK.

Monday, Aug. 13.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Taylor, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Aug. 14.	{ BELLEVUE, Medicine, Dr. Elliot, half-past 1 P.M. CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M.
Wednesday, Aug. 15.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Griscom, half-past 1 P.M. BELLEVUE, Surgery, Dr. Meir, half-past 1 P.M. ACADEMY MEDICINE, 8 P.M.
Thursday, Aug. 16.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Greene, half-past 1 P.M.
Friday, Aug. 17.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Aug. 18.	{ BELLEVUE, Surgery, Dr. Mott, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. CITY HOSPITAL, Medicine, Dr. Griscom, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.

Original Lectures.

CLINICAL LECTURE.

DELIVERED AT THE LONG ISLAND COLLEGE HOSPITAL.

BY

AUSTIN FLINT, M.D.,

PROF. THEORY AND PRACTICE OF MEDICINE.

GENTLEMEN:—I shall ask your attention to-day to a brief consideration of the practical points pertaining to two cases presenting at our clinic. One of these is a case of hæmatemesis; the other a case of enlargement of the heart.

HÆMATEMESIS.

Case.—John H.—, aged 60, married, cartman, vomited blood first in May, 1889, at 2 P.M. Had taken no dinner on that day, and complained of vertigo. Prior to this date he had no symptoms referable to the stomach, save some degree of soreness in the epigastrium. He had previously suffered from vertigo. He thinks that he vomited two quarts of blood, liquid, and of a dark color. Four months afterward he again vomited blood, presenting the same appearance, and, as he estimates, a pint in quantity. For a day or two after this attack he passed blood by the bowels. The hæmatemesis has since been twice repeated. No other definite symptoms appear in the previous history. He now complains of palpitation and shortness of breath on exercise. Stimulating food occasions gastric uneasiness. He is highly anæmic, and has been unable to work for some time.

The first point in this case is to determine that the patient has actually had hæmorrhage from the stomach. As we have not seen the blood, we have to base our opinion on the account given by the patient. There appears to be no room for doubt that the blood was vomited; the quantity of blood, its dark color, the absence of bubbles, and the occurrence of a distinct act of vomiting show that it came from the stomach.

The next point is, upon what pathological condition is the hæmatemesis dependent in this case; for, although hæmatemesis, for the sake of convenience, is reckoned a disease, it is, in fact, only a symptom of disease. Different pathological conditions may give rise to it. It may proceed from a morbid change in the blood itself; but then there would be likely to be hæmorrhage in other situations at the same time. Its occurrence repeatedly from the stomach alone denotes a local, not a general pathological condition.

Hæmatemesis is an event which occasionally occurs in connexion with cirrhosis of the liver. The obstruction to the portal circulation, incident to cirrhosis, may cause the vessels of the gastric mucous membrane to give way, and thus occasion hæmorrhage. But if cirrhosis existed sufficiently to give rise to hæmorrhage, we should expect dropsical effusion into the peritoneum, or ascites. This symptom is not present in this case. We should also expect to find the liver contracted; but on determining the vertical diameter by percussion, the organ appears to be of normal size. Moreover, the patient is not addicted to intemperance. We may therefore exclude cirrhosis.

The hæmorrhage may proceed from carcinoma of the stomach. Positive evidence of this would be afforded by a tumor seated in the stomach. On careful examination of the abdomen no tumor is discoverable.

Ulceration of the stomach remains as a probable condition giving rise to the hæmorrhage. The repetitions of the hæmorrhage point to some organic lesion, and a gastric ulcer may be strongly suspected, although the diagnosis cannot be positive.

The anæmia, which is marked, may be in a great measure dependent on the loss of blood. The patient presents a straw-colored complexion, which suggests the existence of

carcinoma. This complexion, however, is by no means diagnostic of cancer; it may exist without cancer, and is often absent when cancer exists.

Palpitation, and want of breath on exercise, being symptoms in the case, it is important to determine whether there be organic disease of heart, or only functional disturbance of this organ. Cardiac lesions might also stand in a causative relation to the hæmatemesis. On auscultation I find a soft, feeble, systolic murmur at the apex of the heart. This renders it probable that there is some mitral insufficiency. The heart, however, appears not to be enlarged, and hence the mitral lesion has, as yet, not led to evil consequences. The heart affection is chiefly functional.

This patient presented himself at the Clinic a week ago. I then prescribed the laurel water, in doses of a teaspoonful three times daily as a palliative. He reports that he has improved, and he thinks that this remedy has been useful to him. I will now prescribe for the anæmia the citrate of iron and quinine, grs. v., three times daily. He will report himself from time to time, and afford us an opportunity to note the progress of the case.

ENLARGEMENT OF THE HEART.

Case.—C. M.—, aged 66, married, carpenter. Since the first of January last, this patient has complained of palpitation and dyspnoea on exercise. These symptoms have progressively increased. He now experiences want of breath on slight exertion, and dyspnoea occurs at times while he is at rest. He is unable to lie with his head low. He has had cough and expectoration since January, and recently on one occasion he raised a little blood. He had rheumatism a year ago.

These are the prominent facts in the history of this case. Judging from the symptoms alone we should not find it easy to decide whether they are due to a pulmonary or cardiac affection. Let us direct attention to certain points which will enable us to localise the disease.

On examination of the pulse, I find it feeble and irregular, but not notably jerking. Visible pulsation of the carotid and subclavian arteries is marked. This symptom points to a particular lesion, viz., insufficiency of the aortic valve; but the diagnosis of this lesion cannot be based on this symptom alone. We must explore the chest in order to arrive at a positive conclusion as respects the seat of the disease. It is at once evident that the heart is considerably enlarged. What is the evidence of this? In order to appreciate the significance of certain signs, it is necessary to know the situation of the heart in health, and its relations to the walls of the chest and the pulmonary organs. The important points are, the organ is situated between the third and sixth ribs, lying obliquely, and its apex ordinarily striking in the fifth intercostal space from half an inch to an inch within a vertical line passing through the nipple, or about three inches to the left of the median line, assuming the patient to be sitting or standing. The anterior surface of the organ is uncovered of lung and in contact with the chest over a triangular space bounded as follows: below by a transverse line drawn from the point where the apex beat is seen or felt, to the median line, and on the right by the median line—these two lines form a right angle; now, connecting them by a third line drawn from the median line on a level with the fourth rib to the point where the apex-beat is felt, and we have a right-angled triangle, which defines, with sufficient correctness for practical purposes, the space in which the heart is uncovered of lung. This space is the "superficial cardiac region." The space in which the heart extends beyond this region, i. e., in which it is covered by lung, is called the "deep cardiac region." On the left side this region is bounded by a line falling a little within the nipple.

Now when the heart becomes enlarged, the situation of the apex-beat is changed. It is carried to the left of its normal site and frequently lowered. The superficial cardiac region is enlarged, because the heart uncovers itself of lung more and more in proportion as it increases in size. The outer limit of the deep cardiac region, or, in other words,

the border of the heart, is also extended. On the left side it extends more or less beyond the nipple.

Let us direct attention to the facts pertaining to these points in this case. The apex-beat is seen and felt in the sixth intercostal space an inch and a half without the nipple. We can delineate the superficial cardiac region by determining its upper limit on the median line by means of percussion. I find it to be on a level with the fourth rib. Connecting this point with the point where the apex-beat is found, by a line drawn on the chest with ink, we have the hypothenuse of a right-angled triangle which we are able at once to complete. Within this triangle draw another representing the superficial cardiac region in health. You perceive that the actual region is considerably enlarged. Let us verify the correctness of the delineation by percussion. Percussing lightly immediately above and then immediately below the oblique line of the triangle, the difference in the percussion-sound is obvious; above the line we have pulmonary or vesicular resonance well-marked, but below, this resonance it is nearly absent or, in other words, there is notable dulness. We can also determine the extent to which the lung covers the heart by auscultation of the voice. The vocal resonance abruptly ends at the points where the beat is in contact with the thoracic walls.

The heart, then, in this patient is considerably enlarged. Nothing can be more simple than the means by which this is ascertained. Now, enlargement of the heart in the vast majority of cases proceeds from lesions of the valves, involving obstruction or regurgitation, or both. Are there valvular lesions in this case? These lesions are generally evidenced by the existence of a cardiac murmur. But by auscultation in this case I do not discover any murmur. I am not warranted in saying positively that valvular lesions are wanting because a murmur is not discoverable, although it is rare for these lesions to exist without murmur. Perhaps subsequent examinations will enable me to discover a murmur. The visible pulsation of the arteries already referred to, suggests aortic regurgitation. Lesions giving rise to aortic regurgitation are more likely to be unattended by murmur than other lesions—especially those which give rise to mitral regurgitation.

Leaving the question as to the existence of valvular lesions to be settled hereafter, we come to a question of great practical importance. Is the enlargement of the heart in this case due to predominating *hypertrophy*, or to predominating *dilatation*?

Enlargement due to obstructive or regurgitant lesions, or to both combined, is due, first in the order of time, to hypertrophy. The valvular lesions lead to increased power of the heart's action; and this increased power of action, persisting for a long time, causes increased growth of the muscular structure of the heart, precisely as prolonged exercise of the voluntary muscles leads to their becoming more and more developed. The heart grows until it attains to a certain bulk, but not to an unlimited extent. This growth, or hypertrophy, has its limit here, as it does in the voluntary muscles. When it reaches its limit, dilatation ensues, and increases until it predominates over the hypertrophy. This is the usual course of enlargement of the heart; and it suffices for all practical purposes to distribute cases of enlargement of the heart into two classes, viz: 1st. Those in which hypertrophy predominates; 2d. Those in which dilatation predominates.

This division is based on a highly important distinction. Hypertrophy increases the power of the heart's action, but dilatation involves weakness of the organ. Hypertrophy is an important conservative provision of nature to compensate for the disturbance of the circulation arising from obstructive or regurgitant lesions. We should not therefore seek to lessen the hypertrophy. Heretofore this has been an object of medical treatment, and the condition of patients has been affected unfavorably in proportion to the effect of the treatment, so that they have been lucky who were not aware that they had disease of the heart, and thus escaped the treatment directed to hypertrophy. So

long as hypertrophy predominates, the patient is comparatively safe and free from the evils of organic disease of the heart. But when dilatation becomes predominant, it is otherwise. The heart is weakened in proportion to the dilatation, and it is at this juncture in the progress of organic disease that patients are apt, for the first time, to apply for medical aid.

Physical signs which denote hypertrophy are, a powerful apex beat of the heart and a heaving impulse of the præcordia. On the other hand dilatation may be inferred when, in connexion with enlargement, the apex beat and movements of the præcordia denote feebleness, provided that the organ be not weakened by some contingent cause. In this case the want of power in the heart's action indicates dilatation.

The indications for treatment are to strengthen the heart, by a nutritious, dry diet, consisting of a good proportion of animal food; by tonic remedies, and exercise in the open air so far as it can be taken without producing dyspnoea.

I shall prescribe for this patient the citrate of iron and quinia as a tonic. He is somewhat anæmic, and much of the disturbed action of the heart may be due to functional disorder superadded to the organic disease. I shall advise him to adopt a generous diet, and to exercise as much as he is able without inducing palpitation or suffering from want of breath. Notwithstanding the existence of organic disease, it is highly probable that the condition of the patient may be improved.*

CLINICAL LECTURES ON CONSTITUTIONAL SYPHILIS.

DELIVERED IN BELLEVUE HOSPITAL,

BY

ALFRED S. LOOMIS, M.D.,

PHYSICIAN TO THE HOSPITAL.

SYPHILITIC ERUPTIONS.

GENTLEMEN:—The disease which will occupy our attention to-day, and at some of our subsequent public visits, has received the name of Constitutional or Secondary Syphilis. By the term we understand, that the fluids and solids of the body, being acted upon by syphilitic poison, a special constitution is created. The constitution of an infected person is thenceforward changed. You may say, if you please, that he has a syphilitic diathesis. No organ or tissue of the body is exempt; the blood being charged with a poisonous principle, every organ and structure supplied with that blood must and does suffer. At its advent the brain evinces its suffering by mental dejection; the nerves by a sensation of lassitude; the heart by its accelerated action; the skin becomes dry, the tongue coated, the fauces congested—in a word, you have a syphilitic fever.

But how is this venereal poison introduced? We answer—1st. Through a *primary sore*, termed a chancre. 2d. By *physiological absorption*, by which I mean that the natural secretions of the mucous membranes of a person suffering with constitutional infection may be the medium of transmission of the poison; and the recipient of the poison, without any local diseases, may receive it into the system at once, and become contaminated. 3d. By *hereditary descent*, from the parent to the offspring. 4th. By *secondary transmission*; that is, certain secondary manifestations can be transferred by inoculation from one to another without their secondary character being changed. Of these methods of introduction, conveyance by means of the primary sore is by far the most frequent; and the primary sore may be located upon any portion of the body, as well as upon the genital organs.

Now, syphilitic poison being once introduced into the

* This patient subsequently died, and the heart was removed by Mr. Gordon, and exhibited by Prof. Flint to the class. It weighed eighteen ounces. Its circumference at the widest part was eleven and three-quarters inches. The organ was flabby, the walls collapsing. The walls of the left ventricle at the thickest part measured four-fifths of an inch: the dilatation predominating. The valves were sound. The muscular walls presented the appearance of healthy muscular structure.

circulation, no doubt it reproduces itself, as it were, by a species of fermentation, and when its accumulation reaches a certain point, evolution begins, producing certain effects. For instance, this girl, as you see, has an eruption upon her face, neck, shoulders, and arms. Very little of her history is known, but the eruption has a characteristic physiognomy which speaks for itself. It is produced by the action of syphilitic poison upon the skin, causing what is termed a syphilitic eruption. The time that elapses before the first manifestation of constitutional infection, after the primary accident, is usually from three weeks to three months; and usually the first symptom of constitutional infection is adenitis, which we will pass over to-day, and confine ourselves to the next most frequent, viz., the eruptions. All syphilitic eruptions have certain characteristics, which are—1st, *color*; 2d, *form*; 3d, *chronicity*; 4th, *cicatrices*, which remain after the disappearance of the eruptions.

We come now to the classification of the eruptions. Venereal disease first made its appearance in Europe under the form of a cutaneous eruption; and the earliest writers on syphilis confined their descriptions of that complaint to a pustular affection of the skin. Not until the early part of the nineteenth century was any attempt made to classify syphilitic cutaneous diseases, and then they were grouped together, and described under the name of syphilidea. But as this classification was founded without any reference to the elementary character of the diseases, distinct varieties were confounded; and not until M. Biet published his researches into the pathology of this family of cutaneous diseases, was any distinct classification attempted. He has been followed by M. Cazenave, Wilson, and others, who have completed a perfect classification.

M. Cazenave establishes seven varieties, viz., *Exanthematous*, *Papular*, *Tubercular*, *Vesicular*, *Squamous*, *Bullous*, and *Pustular*.

I shall not be able to go through all the different forms that occur under each of these heads, but will speak in detail only of those that are most frequently seen, and of which I have specimens to show you.

1st CLASS—The Exanthematous.—These are characterized by red spots of different forms, scattered irregularly over the surface of the body. There are two varieties of this species, viz. *Roseola Syphilitica* and *Macula Syphilitica*. The first assumes an acute form, and at its commencement resembles common roseola, but soon it has the coppery tint; it occurs for the most part on the trunk and limbs. In this girl, who was admitted into the hospital yesterday, you have this form of eruption presenting itself over her chest and arms; it made its appearance, as she states, for the first time on her admission. You notice its bright hue, but still it has a mottled appearance—strictly this would be called roseola versicolor. This is a simple congestion of the skin, produced by the action of syphilitic poison. Wilson says that this mottled roseola rash forms a base upon which the papules of lichen are developed; it generally makes its appearance suddenly, and soon disappears or is changed into other forms of eruptions. The second variety, the *Macula Syphilitica*, usually pursues a chronic course, and is characterized by irregular circular patches, from one or two lines to as many inches in diameter, appearing most commonly on the neck, scalp and face; they terminate by resolution, or by slight exfoliation of the epidermis. There is no case of this eruption in our wards at present.

2nd CLASS—The Papular.—You have a beautiful specimen of this variety in the girl who has been an inmate of the hospital ten days. She was treated for primary, three months since at the Island Hospital. The papules, as you see, are scattered in clusters, each cluster containing a dozen or more pimples, over her shoulders and limbs. Each pimple is about the size of a lentil, with an indurated base, surrounded by an areola of a dull red hue. This is *syphilitic lichen*, the common form of papular eruptions. Exfoliation generally follows the progress of this eruption—which process, you perceive, has just begun in this case. Sometimes the papules suppurate at their apices, connected

in all cases, it seems to me, with the administration of iodide of potassium.

3d CLASS—The Tubercular.—In this girl, who has been a month in the wards, and who to-day, in addition to her eruption, has symptoms of iritis, you have an example of this class. This and the papular are the most frequent of all the venereal eruptions. They differ in appearance, as you see, but slightly. Wilson says, "That in many cases it is nothing more than the hypertrophy of the elements of a papule." The girl before you presents on her face, neck, trunk, and limbs, a well-marked tubercular eruption of the variety called by Wilson tuberculatum corymbosum. As you feel of these little tumors they are solid, resisting, containing neither pus nor serum, slightly elevated above the level of the skin; in this case disposed in clusters or groups—in other cases they are disseminated over the whole surface (called tuberculata disseminata). The color, you notice, of the eruption before you, is very coppery. It first made its appearance six weeks since, during which time, from the debilitated condition of the patient, we have been compelled to administer tonics alone, mercury administered in any form ptyalising her in twenty-four hours. You notice that the epidermis covering each tubercle is becoming dry, cracked, and peeling off, leaving a fringe around the base of each. You also notice that there is a slight disposition on the part of these tubercles to form circles. M. Biet describes five varieties of tubercular eruptions, each depending on some peculiar deviation in appearance. But want of time, and cases to show you, will prevent me now from describing each variety. You have the main features of all presented in this case. There is one peculiarity of all syphilitic eruptions, especially marked in the tubercular variety, which I have neglected to state, viz. tendency to ulceration occurring late in their manifestations.

4th CLASS—The Vesicular.—This is a rare form of syphilitic eruption. Liston says it follows a hæmatemous chancre. Eczema is the most common example of this variety. I have never seen a well-marked eruption of this class.

5th CLASS—The Squamous.—This usually appears in the form of psoriasis; it is characterized by the presence of a dry scale of a shining, greyish white color, slightly elevated; when these scales become detached, the surface remains smooth, and of a dark color. This also is not a common syphilitic eruption, and I have no such case to present to you to-day.

6th CLASS—The Bulla.—This is the most common variety of eruption in the hereditary syphilis as seen in children. I have never seen a well-marked case except in children. The tumours are regularly circular and vary in size from a pea to an egg.

7th CLASS—The Pustular.—This is the last and most interesting variety to which I will call your attention. Wilson says the only eruption that comes strictly under this denomination is rupia. But it seems to me that the case before you, which presents the characteristics of what M. Cazenave calls syphilitic acne, comes strictly under the head of pustular eruptions. It is in reality a papulo-pustular eruption—a pustule being as it were engrafted on a papule. The pustules you see are distinct, about the size of a millet seed, on an indurated base, of a well-marked coppery color, and confined to the face. Their progress is invariably chronic. They never terminate in ulceration but by the formation of slightly adherent crusts.

But the great interest attached to pustular eruptions is that through them constitutional syphilis is capable of being conveyed from one to another by inoculation. Vidal and others have succeeded in establishing this beyond a doubt. I refer you to Vidal's experiments as related in his work. Now the question arises, gentlemen, why do these eruptions differ so widely? A great many words have been expended on this subject. Some maintain a plurality of poisons, among whom is Vidal. Others have ascribed it to the action of one poison on different constitutions, among whom is Ricord. Others to difference in the form and location of the chancre, among whom are Liston and Carmichael, and

others, to treatment. I am not prepared to make an unqualified statement in this matter. But with my present experience, the differences in the form of the eruption seems to me to depend upon the character and amount of the poison introduced, the duration of the infection, somewhat perhaps to the differences in constitution, but especially to differences in hygienic and medical treatment. This brings us to the treatment of the different forms of eruptions which we have been considering, all of which a limited experience will teach you can be improved or aggravated by treatment; for instance, I have seen a papular eruption rapidly change to a pustular—the change being effected as I believe, by the injudicious administration of iodide of potassium.

I shall not detain you with the long list of remedies which have been employed in the treatment of constitutional syphilitic eruptions. There are but two that seem to me to exercise any control over these manifestations of constitutional syphilis, viz, mercury and iodide of potassium. The first is by far the most important. The second is merely a palliative not a curative agent. In addition to these remedial means, a strict hygienic course must be added. In pursuing the mercurial treatment, there are certain rules which must be rigidly observed. It should never be given in the acute stage of a syphilitic eruption, and it must not be commenced when the patient is in an extremely debilitated condition. Stimulants of all kinds, either in food or drink, and exposure to cold or fatigue, are to be carefully avoided during its administration. The functions of all the depurating organs, especially the kidneys, should never be lost sight of. No precise rule can be laid down as to the quantity to be administered in a given case. The modes of administration are internal and external. All the preparations of mercury commonly used internally may be exhibited, but of these I prefer the bin. or protiodide, a third of a grain three times a day in pills. The external modes are by ointments and vapor baths. I prefer the baths as recommended by Langston Parker. He directs to raise the vapor of water by means of a lamp, and at the same time introduce beneath the cloak which surrounds the patient an oxide of mercury furnished with a separate lamp, for the purpose of vaporizing it. By means of these baths I have been enabled to overcome obstinate tubercular eruptions, which yielded to no other method of administration.

The length of time which a mercurial treatment should be continued must not be limited to weeks but to months, and perhaps to years. I have a private patient now under my care who has pursued a continuous mercurial treatment nearly two years, and at no time has he been pyralized; never pyralize a syphilitic patient if you can avoid it; it is a misfortune to the patient if it occurs. All forms of syphilitic eruptions, except the pustular, I believe, can be arrested and cured by mercury alone, and if its administration is persevered in long enough, and proper hygienic rules are strictly observed, I am certain that the syphilitic poison producing them can be entirely eradicated from the system. But if a pustular form of eruption is once fully developed your prognosis becomes doubtful—mercury, your best friend, fails you, and you are compelled to resort to iodide of potassium, as a palliative, not as a curative agent. I have yet to see the first case of constitutional syphilis permanently relieved by iodide of potassium. I have often relieved the worst forms of pustular eruptions by its administration (in fact, when I could relieve them by no other means). To all appearance my patient was well, but in every case have I found them returning to me with the same, or some other manifestation. The course I propose to you in the treatment of these pustular eruptions is, first; with iodide of potassium, and the best hygienic measures, put your patient as far as possible in a state of health; then order him mercurial baths twice a week for perhaps a year, the longer the better. I shall call your attention to this again when we are considering some of the other manifestations of constitutional infection.

Original Communications.

ON DIPHTHERIA AND DIPHTHERITIC AFFECTIONS.

A CONTRIBUTION TO INFANTILE PATHOLOGY.

BY A. JACOBI, M.D.

[Continued from page 98.]

The etiology of diphtheria shares the fate of that of all the zymotic diseases, of being exceedingly obscure. It is an endemic as well as epidemic disease, and will therefore be found with every constitution, amongst all classes, in either sex, at all ages, in all climates, and at all seasons. But some differences are found that modify our assertion to some extent. The first four or five months of both years, 1859 and 1860, show by far the largest number of cases. In our cases, besides, the male sex was in a slight but decided majority throughout the whole course of the epidemic. Age, too, shows differences similar to those exhibited for scarlatina and measles. The two hundred cases enumerated above are of children under fourteen years of age; the number of diphtheritic cases beyond this age, in the same institution, for the whole time, is from thirty to thirty-five; moreover the large majority of those two hundred cases occurred in children from two to five years of age, the average age being three years. Cases under a year are not frequent, over nine or ten years proportionately rare. We do not remember to have seen a patient suffering from diphtheria at the age of more than fifty years, but have been told of some few occurring between seventy and eighty. The majority of cases were children with impaired constitution, badly fed, and with bad digestion, anæmic or suffering, or convalescent from another disease that diminished the amount of the solid elements of the blood, and the strength and power of resistance. Among the most unpropitious accompanying or preceding diseases are scarlatina and measles, which generally give a pretty unfavorable prognosis when existing with or followed by diphtheria. Scrofulous individuals, with catarrhal affections of the mucous membranes, of long standing, are particularly subject to being affected, and thus, undoubtedly, poverty, dirt, and want of care have a great influence in producing this and other general diseases. Dense population must be accused in many instances, firstly, because of its very co-existence with poverty, want of fresh air, and uncleanness, and secondly, because of the readiness of communication by direct contagion. But it is nevertheless a fact that many cases, and many dangerous and fatal ones, occurred in healthy and robust children, wealthy families, good situation, and fresh air. We have observed a case of diphtheria in a girl of seven years in west 12th street, and of four years in west 21st street, requiring month after month to get entirely well; it being well understood that there is scarcely any disease that may be latent for such a time, or apt to recur so easily and certainly, as diphtheria; to such an extent as to leave the question open whether we have to deal with a new case, or a return of the old. A bright and healthy girl of five years in west 29th street, suffered severely during the spring, 1859, got better, left the city, and appeared to be entirely well, and lively, and thriving during the summer, all the time sojourning in the country. But scarcely had she, in September, reached the city again, when she again was affected with the same complaint, and more severely this time than before. Beside extensive membranes in the throat and consecutive ulcerations, she suffered from such a degree of cervical adenitis as to be in imminent danger from the deep and extensive suppuration taking place in the subcutaneous cellular tissue and between the muscles of the neck. Diphtheritic exudation taking place mostly in the throat, the catarrhal and inflammatory affections of the throat will often appear as occasional causes of diphtheria; just so cutaneous diphtherite will be

produced by frost bites, sore nipples, ulcerations of the skin, on impetiginous pustules, or wherever there is an occasion for diphtheritic depositions. Why these depositions change their primary seat; why, for instance, there are cases, showing no exudation but in the external ear, or in the vagina, is very difficult to explain, except by supposing a local transmission of a contagion, or local lesion of the surface. Thus in a girl of two years, living in Greenwich street, near the Battery, no diphtheritic membrane was found except in the vagina which was entirely covered; nevertheless the fever was high and of a decided adynamic character, and some inguinal glands were swollen; the child required several weeks after the vaginal membranes had disappeared to recover her former strength. Cutaneous diphtherite belongs to those forms the etiology of which is generally not very obscure. For most of these cases are of a secondary nature, there being exudation in the throat and general diphtheria. A boy of three years, of Main street, Brooklyn, who had suffered from pharyngeal diphtherite for several weeks, and had impetiginous pustules on his back and lower extremities, had them changed into large diphtheritic ulcers, with thick and discolored membranes, of a depth of from a quarter to three quarters of an inch. Varioloid pustules we have observed to take an equally remarkable and dangerous change. Skin, denuded of its epidermis by a vesicatory, we have in a few instances found to be covered, after the lapse of a day, with a diphtheritic membrane. On a boy of three years, in avenue B, who had been affected with pharyngeal diphtherite before being attacked with laryngeal diphtherite, we performed tracheotomy; ten hours after the operation was performed, the external wound was covered with thick membranes, and kept, while the diphtheritic exudation was increasing in the pharynx also, its greyish white color for five or six days.

Our knowledge of the pathological anatomy of diphtheria is very defective, especially in regard to such alterations as take place in the blood and general system. The microscopical appearance of the pseudo-membranes has been described in our remarks on the nature of the disease; *oidium albicans*, and *leptothrix buccalis* have been found by some writers, and have even been considered by them to be the cause of contagious transmission of the affection; we have not, however, been able to identify them in those few microscopical examinations we have made; and we believe that those microscopical fungi are but accidental occurrences in the exudation. We have further described the appearance of the mucous membranes as to whether the exudation was but a covering to its substance, or imbedded in its tissue and leaving more or less deep ulcerations. Pneumonia, bronchitis, and the results of complications of diphtheria were not unfrequent in those fifteen or sixteen cases where we were allowed to make a post-mortem examination. The skin would sometimes present the appearance of furfuraceous desquamation on some parts of the body, as it will be found in a large number of diseases attended by high fever and rapid diminution of the subcutaneous tissue. Petechiæ were found in a few instances, generally most in the præcordial region, hypogastric region, and on the thighs. The submaxillary and cervical glands, with the surrounding tissue, were generally swelled, but not to such an extent as might be expected from the swelling during life; the tonsils were either swelled, not hyperæmic, or covered with deep ulcerations, or again consisting, to a great extent, of a grey fibrous mass; uvula ulcerated, sometimes much diminished in size; liver and spleen in a few cases greatly hyperæmic in spite of general anæmia; in one instance there were apoplectic clots in the tissue of the spleen; in others they were as anæmic as the body in general. The blood was generally thin and liquid, and several times of a dark, scorbutic color, the meningeal bloodvessels were distended with blood, undoubtedly a consequence of moribund condition. In the case of death from uræmic convulsions, in Hoboken, a small vein near the left sinus transversus was ruptured and a small clot of blood presented itself outside the vessel.

Thus the results of post-mortem examinations are certainly few; there is nothing in them characteristic of diphtheria, except the local alterations; and in this respect diphtheria takes part in the general nature and anatomical mystery of the zymotic diseases as a class.

The diagnosis of diphtheria, and particularly of diphtheritic affections of the pharynx ought never to be difficult. At all events, it can be made with less difficulty than scarlatina which will not unfrequently be recognised from its consecutive diseases only; for there is one pathognomonic symptom which will never fail to give certainty, viz., the pseudo-membrane. All the other symptoms, as headache and earache, submaxillary and cervical adenitis, erythematous or oedematous swelling of the fauces, fever, convulsions, toxæmia, and prostration, foul smell from the mouth and nose, albuminuria and hemorrhage, severe though they may be, are not pathognomonic. Each of these symptoms may either be produced by other diseases, amygdalitis or general pharyngitis, any febrile disease, particularly scarlatina or other acute exanthema, gangrenous sore-throat or meningitis; or they may be absent in a case of genuine diphtheritic affection. The difference, as to severity and danger, in diphtheritic affections is at least as great as in any other epidemic malady; and many cases have such an innocent appearance that authors have been induced to comprehend them under the name of herpetic angina. As to this we have stated our reasons for considering them as mild forms of diphtheria which, however, may lead to very severe consequences; there is in them a local diphtherite with no fever or only a slight febrile attack with intermittent character. Nasal discharge, and foul smell from the nose and mouth are not at all required to ensure the diagnosis, nor is any symptom of the same importance as the exuded membrane. It will not be difficult to distinguish the diphtheritic membrane from gangrenous pharyngitis; but it must be well borne in mind, that local gangrene may be a complication of diphtheria. Even Bretonneau has observed, that diphtheritic membranes would sometimes cover the exulcerations produced by pultaceous cyanche. The differential diagnosis from scarlatina will, in some instances, cause difficulty, for several reasons. Scarlatina is frequently complicated with diphtheria; thus, whenever the eruption is of no account or escapes the attention of the physician, a mistake is easily made. Secondly, albuminuria is common to both, and perhaps there is no other difference between the two except this, in many instances, that the urine of scarlet fever patients will more generally show casts. And finally there is, too, an erythematous eruption of the skin which may be mistaken sometimes for the eruption of scarlatina. Some writers, like Dr. Peter, take such cases to be scarlet fever complicated with diphtheria; such an one of the two maladies as is produced by a greater epidemic influence exhibiting the principal symptoms. We feel no inclination to agree with this opinion; for such cases will sometimes turn out as diphtheria, from subsequent symptoms, as, for instance, paralysis; no scarlatinous desquamation has ever been observed by us, and the little furfuraceous desquamation that sometimes will take place, has, in some instances, been found where no erythematous eruption had preceded, and finally, a light erythematous eruption is not an absolutely uncommon occurrence in any of the febrile diseases of infancy. We finally add, that we have observed diphtheria in individuals, and even returning for the second time, who had suffered from scarlatina before. This remark we make in regard to those who are inclined to recognise an identity between scarlatina and diphtheria.

One case under our observation offered a remarkable point as to diagnosis. A man suffered from what appeared to us to be pharyngeal diphtheria, with fever, etc., for some days before he was taken into the Jews' Hospital; he grew anæmic and prostrated, but the membranes did not take very long to disappear from the soft palate and uvula, under a simple antidiphtheritic treatment. Something like a fortnight afterwards the uvula and soft palate again exhibited

a grey coating, which soon, in the course of a few days, increased considerably in size and showed the symptoms of syphilitic ulcerations. The patient denied ever having suffered from chancre, nor could we discover any marks. Our antidiphtheritic treatment was continued for about six days until the soft palate was perforated. Feeling sure then that we had to deal with secondary syphilis, probably brought on prematurely by the preceding diphtheritic affection and oedematous swelling of the parts, we commenced a mercurial treatment; the patient confessed as to his having had syphilis, but it was then too late to save all of his soft palate.

The prognosis depends on the condition of the child preceding the attack, on its age and general strength, on the character of the affection, and on the absence or presence of dangerous complications. Children will die in a larger proportion than adults; these being affected in a larger number with diphtheria than with scarlatina, etc., but for no other reason except this, that scarlatina will, as a general rule, take effect once during the life of a patient, while diphtheria has a great tendency to return. Anæmic and sickly children are in great danger under all circumstances; cutaneous diphtheria will prove fatal in many instances during the first year where cutaneous eruptions are common occurrences. The extension of membranous exudation in the pharynx, etc., does not always produce a proportionate malignity, except in small children where the breathing is particularly effected through the nose, and even a slight obstruction of its cavities and moderate swelling of the pharynx is able to prevent decarbonisation of the blood. Scarlatina, measles, noma, gangrenous sore-throat, large swelling of the submaxillary and cervical glands, high fever, and extensive pneumonia and bronchitis give no favorable prognosis. But the average mortality is not so great as might be inferred from the reports published on some epidemics. The cases of mild form and average severity are the large majority, and will recover with a rational treatment. Severe cases often perish in spite of anything that may be done to relieve them. Cases that set in with a high fever, considerable adenitis, cerebral symptoms, intense headache and earache, and convulsions, small frequent pulse, and a foul smell from the nostrils and mouth, must be considered as extremely dangerous. Hemorrhages at any place, and of any kind, must be considered as a severe complication, as they indicate a deep-seated alteration of the blood; we have observed hemorrhages from the nose (right nostril), and intestines, and petechiæ. They must be considered as of equal importance to those occurring during or after scarlatina, erysipelas, etc., even in some of those cases where the nasal hemorrhage is produced, as *causa proxima*, by exulcerations of the nasal mucous membrane. Cases of average severity will take from five or six to ten and twenty days to recover; severe cases, unless they prove fatal during the first period, may take several weeks or months. But the large majority, according to our experience, ultimately recover. Of about five hundred cases we believe we have lost not more than thirty, but we have seen very protracted convalescences in most of them, depending on the prostration of the nervous power and the anæmic condition of the patients. The causes of death are of various nature. Sometimes it is the dissolution of the blood, the exceedingly high fever, cerebral symptoms at the first onset or towards the end, exhaustion from want of food and absence of digestive power, general nervous prostration, protracted anæmia, or suffocation from obstruction of the respiratory organs.

We need not add that the prognosis becomes more unfavorable than it will be under other circumstances from the fact that the disease is very apt to return. A second attack in a child exhausted by a preceding one will readily prove fatal. Even laryngeal diphtheria has been observed to recur, although we have never seen an instance of croup twice occurring in the same individual. Guersant performed tracheotomy twice in each of two children, after intervals between the two attacks of eleven and of twenty-

one months. A few other cases of the same kind have been reported.

One of the most remarkable consequences of diphtheria is total or partial paralysis or paresis. Paralysis of the velum palati will, in many cases, be observed during the course of the exudative process and oedematous swelling, and in this case must be taken as directly depending on the natural alteration of the tissue. The voice will have a nasal twang, and food, particularly of the liquid kind, will regurgitate through the nose, but in other instances it will not make its appearance before the process is all over, and the patient, although still anæmic, on a fair way to convalescence. We saw, this week, a little boy of three years who, for the last four months, has had this nasal twang and suffered from regurgitations of liquid food, after having gone through a slight diphtheritic affection of the pharynx, in the first half of January. The same remarks are applicable to other forms of paralysis, as strabismus, of which we have observed several cases in children. We may here state that we have seen no other forms than those two enumerated, in infancy. In adults we have observed several instances of general paresis of either the motory or the sensory nerves, sometimes the two together. The lower extremities will be the first affected, and afterwards the sexual parts, upper extremities, hearing, taste, smell, and sight will be involved in the general affection. The motory nerves were mostly affected, physical exertion being extremely difficult; sensibility was sometimes intact, sometimes disturbed so as to make walking and grasping in the dark exceedingly difficult. The youngest individual in which we have seen these general symptoms was a lady of seventeen years, in whom motion, sensibility, sight, voice, and intelligence suffered in an equal degree. The respiratory muscles have been reported, by authors, to have been paralyzed; we have not seen any such case, unless that reported on page 96 belonged to this class. As we had no experience whatever on this point, at that time, we then directed no particular attention to this fact. The prognosis in these cases is favorable; all our paralytic patients recovered in the course of from two to five months. Even complete amaurosis, of which we have not seen a case, is reported by Maingault to have recovered in a little more than six months. A few cases of death, however, have also been related; in two instances from suffocation produced by food getting into the larynx, the pharyngeal muscles being paralyzed.

The cause of this paralysis is somewhat obscure. It is but natural that a material alteration taking place in the soft palate should interfere with its functions. But the majority of cases date from convalescence, will sometimes appear suddenly, and sometimes are gradual in their development. It may be observed after very severe attacks of diphtheria, and again after apparently a mild form; we have stated that it followed some light cases of so-called herpetic angina; and we have above pointed to the fact, that many cases of diphtheritic paralysis were preceded by albuminuria. We do not hesitate to attribute general paralysis of this kind to the want of sufficient nervous power, produced by the diphtheritic hydræmia (which, too, we consider in these cases as the cause of albuminuria). Local paralysis we are inclined, from physiological reasons, to attribute to local extravasation or exudation, the last cause of which must also be sought for in general hydræmia and facilitated transudation. We have seen one instance of loss of hair during convalescence.

The diagnosis of diphtheritic paralysis is made sure by the history of the case, and by its difference from other forms of paralysis. Paralysis from myelitis begins with clonic and tonic convulsions, and descends slowly, and the pharynx suffers last, whereas diphtheritic paralysis shows the affection of the pharynx and the power of speaking at first. Galvanic contractility is also intact (which is not the case in spinal paralysis); and paralysis, according to what has been observed in other epidemics, has a great tendency to localization in diphtheria.

As to the treatment of diphtheria and diphtheritic affec-

tions, we venture upon the following remarks:—The disease, which has been the subject of the foregoing exposition, has been shown to exhibit prominent symptoms of two different kinds, viz.: local and general. Thus the treatment, where any is required, has to fulfil two distinct indications. We say, wherever it is required, for experience shows that a number of cases will get well without any treatment whatsoever, so that it is not a very unfrequent occurrence to meet with light tonsillar diphtherite without fever, or any other dangerous symptom, in children to which we are called for some other complaint. In such cases light fever may have been present, and large membranes have been exuded on or into the mucous membrane of the pharynx, and nevertheless the whole course of the disease has passed unheeded and untreated. Such an occurrence is certainly not exceptional, for the same is true of other diseases, particularly those of zymotic origin. The majority of zymotic diseases require little or no medical treatment at all, especially those running their course in a distinctly typical manner. As to diphtheria, we have even made direct experiments, showing that mild cases will get well without treatment. But we think it more dangerous in diphtheria, than in other zymotic diseases, to abstain from treatment altogether, for three reasons:—Diphtheria is not a typical malady, but has a great tendency to return; it is more of an adynamic character than any other; and, finally, by the thick and extensive exudations in the pharynx and on the adjoining parts, it is apt to produce serious troubles, by mechanical encumbrances to deglutition and respiration.

The local treatment consists of cauterization of the membranes and surrounding parts with the solid nitrate of silver, or with strong or mild solutions of the same salt in water (3 ss.-j.: ʒj.); of gargles, consisting of solutions of (or applying in substance) astringents, such as tannic acid, alum, sulphate of zinc, or claret wine; in gargling with, or applying, such medicinal agents as are known to have some effect on the constitution and tissue of the pseudo-membranes, as chloride of potassium, chlorates of potassa and soda, diluted or concentrated nitric or muriatic acids, liquor of sesquichloride of iron, etc. Astringents will prevent maceration, render the exudation dry and hard, and alter the consistency of the surrounding hyperæmic and cedematous tissue. It will thus prevent, sometimes, the extension of pseudo-membranes to the neighborhood of the parts already effected, and in some cases may accelerate the expulsion of the membrane as a whole. We have thus seen the best effects from tannic acid, either applied directly to the parts by means of a curved whalebone probang, or dissolved in water as a gargle (3 ss.-ii.: ʒi). Of the tinct. sesquichlor. iron we have seen no particular effect.

Cauterizations with nitrate of silver we have found to be generally of very little use when applied to the pharynx. Its effect is superficial only; it will form a scurf, but will destroy nothing. Destruction of the parts cannot be effected except by forcing the caustic into and below the membrane; this can seldom be done in the pharynx of children, and for this reason cauterization is unavailing at this point, but will prove beneficial, we believe, by confining the process of exudation to its original locality. In cutaneous diphtheria cauterization may be exercised to its full extent, but as these cases are generally attended with extreme prostration, the general treatment will prove both more necessary and successful. If cauterization is to be resorted to, we generally use, and with good effect, more or less concentrated muriatic, or acetic, or nitro-muriatic acid. Where, however, cauterizations are made, great caution is necessary not to mistake afterwards the result of the caustic for pseudo-membrane. This remark is particularly applicable where nitrate of silver has been used.

In regard to the internal administration of remedies, and the general treatment of diphtheria, we have to remember that it is eminently an adynamic disease. Prostration will set in, and complete exhaustion will sometimes destroy patients in spite of the most careful treatment. As a gene-

ral rule therefore no remedy should be administered that will increase the amount of water in the blood, accelerate its decomposition, or exhaust the nervous power. Mercury must be avoided, no blood be drawn, no vesicatories applied, in a word, no antiphlogistic treatment should be resorted to; for the superabundance of fibrine does certainly not indicate antiphlogistic treatment, as it is a well-known fact that in extreme hydræmia the proportion of fibrine may be greatly increased. The more hydræmia is increasing, the greater the proportion of fibrine. For the same reason the careless routine practice of administering large doses of alkaline remedies, carbonates, bicarbonates, nitrates, etc., of potassa and soda, for the purpose of liquefying the fibrine, must be discarded. Their effect is generally not good, and we firmly believe that the duration of convalescence will be lengthened by their free use. Trousseau is certainly right in asserting that rationalism in medicine is very apt to lead to absurdities.

Emetics must be avoided as much as possible; but they will sometimes prove necessary to remove accumulations of mucus or macerated membrane. Then ipecac is preferable to the others. In cases where diphtheria is descending into the larynx, great caution is desirable in administering emetics; for in this form of croup exhaustion will sometimes take place unexpectedly and rapidly before suffocation.

The functions of all the organs have to be kept in order; the kidneys require special attention, the greatest danger being in the interruption of their function. Spir. nitr. dulc., squill, and parsley may be administered; but neither digitalis nor iodide of potassium. The skin will generally act well with liq. acetat. ammon., alcoholic beverages, and frictions. Regular baths, with alcoholic or aromatic admixtures, and change of air and residence will prove beneficial. Digestion must be kept as normal as circumstances will allow; tonic and stimulant diet not only allowed but insisted upon; meat, eggs, coffee, wine, and brandy are recommendable.

As a general antidiphtheritic remedy, chlorate of potassa and chlorate of soda as its substitute, have earned a good reputation. Chlorate of potassa is soluble in sixteen parts of water, and is well tolerated by the stomach. There is no necessity, therefore, for preferring the soda, which is higher in price, though it has the preference in dissolving in three or four parts of water. We do not agree with those who deny the efficacy of this remedy, because it does not meet all emergencies. We have used it in hundreds of cases, beside its administration in stomatitis, mercurial affections of the mouth, etc., and are perfectly satisfied with the result, except in those cases which ran an extremely rapid course with such symptoms as high adynamic fever, quick and small pulse, evidences of dissolution of the blood. In such cases it is too slow in its effects. But in all those instances where a sudden and instantaneous effect is not required, and death is not imminent, it is a highly valuable remedy. But doses of a grain or two will not prove sufficient; it ought to be given in doses of from half a drachm to one and a half drachms daily, dissolved in water, alone, or combined with other remedies. If possible the patient must be made to swallow the solution slowly, to have its local, as well as the general effect.

Acids are very beneficial agents in this disease. Diluted muriatic acid, four, six, or ten drops every hour or two hours, more in proportion to adults, or concentrated nitro-muriatic acid, two or six drops in the same intervals, will be found to act as well locally as generally, and will, besides, increase the appetite and stimulate the digestive functions. The concentrated nitro-muriatic acid we have regarded as one principal remedy in those dangerous cases described above. Good effects have, in many instances, been observed from full doses of tannic acid, ten grains to two scruples and more being given daily, dissolved in water. It has a beautiful local effect in the pharynx when swallowed slowly, and is of invaluable service in renal affection.

As a tonic, iron is highly serviceable. The preparation most in use with the English profession, and with us also, is the tincture of the sesquichloride; its astringent effect has

been praised highly, perhaps too highly; its influence on the whole system in general, and sanguification in particular, is undoubted. Its dose is, according to age, from twenty drops to one and a half or two drachms daily, alone, or as most administered, with chlorate of potassa. Combinations of these, or the two with diluted muriatic acid, or each with the acid, are of the same practical value as they are theoretically justifiable. If tannic acid and iron were to be used, in any form or manner, at the same time, they are to be kept apart, and administered at different times; the tannate of iron being indigestible. Ozanam's formula, bromine *gtt. j.*, bromide potassa. *gr. ij.*, aq. $\frac{3}{4}$ *ij.*, we have tried in fifty cases, from November, 1859, to February, 1860. We have used it in much larger doses than Dr. O., from thirty to fifty drops and more daily, after we were dissatisfied with smaller ones. We think it a valuable remedy except in severe cases; we should not then rely on it; perhaps, however, we have not sufficient experience. We have a similar remark to make in regard to the tincture of iodine, with which we have had but little experience.

Of the greatest value is that powerful febrifuge, quinine. We have but seldom used it as a tonic, but generally in one or two large doses (from five to ten grains in children, of the sulphate or muriate, the latter containing more quinine) daily. We have never seen any bad effects, but have always found a great and rapid remission of the fever. If one dose was taken, we ordered it in the afternoon, usually between three and five o'clock; another was sometimes taken in the morning for one or two days, until there was no necessity of administering it twice. A *conditio sine qua non* is a full dose. A child of a year or two must not have less than five grains in a daily dose; we have even given to children of two or three years, repeated doses of ten grains, and have been fully satisfied with its effect. We have in no disease observed less cerebral symptoms attributable to the effect of quinine than in diphtheria. It will prove particularly successful in such cases as are more or less complicated with acute rheumatism. In the case of a girl of seven years, whose stomach was much disordered, we resorted to subcutaneous injections of a nearly neutral solution of mur. chin. *gr. iv.*, on two subsequent days, with excellent success.

Albuminuria requires tannic acid; we seldom give any other remedy, and warmly recommend it. The functions of the bowels, skin, etc., require the care indicated by the rules of general and special pathology. In a case of hemorrhage from and suppuration in the kidney, in a sickly diphtheritic girl of three years we thought proper to give veratrum, in order to diminish the fever and thus, indirectly, to relieve the congestion of the kidneys; our success was complete; the child being more healthy and robust than for years.

Descending croup, during the epidemic, proved highly dangerous. Patients in some cases had not even sufficient time to die of suffocation; but perished from the exhaustion brought on by the general malady. We feel therefore justified in warning against a free use of emetics, as a new source of exhaustion. We have no particular remedy to recommend; the treatment should vary according to the case. But, in referring to our remarks and cases above, we feel sure that even of such cases many will in future be saved by tracheotomy.

Hemorrhages require, locally, astringents, and the general antidiphtheritic nutrition and treatment. Wherever the seat of hemorrhage can be reached we doubt not but the application of tannic acid, muriated tincture of iron, or better that anything else, persulphate of iron will prove successful instantaneously.

Paralysis requires moderate, very moderate, active and passive motion. The eyes require great care and perfect quiet. Local paralysis indicates local galvanization; thus, in paralysis of the soft palate, one pole is applied to the palate, and the other to the mastoid process. In general paralysis iron and strychnia are indicated; the latter we have used, on the recommendation of Trousseau, until a slight convulsive flexion, usually in the thighs first, became perceptible. Our dose was, in adults (as we have

not seen children with general paralysis), from the one-eighth to the one-sixteenth of a grain, twice a day.

Submaxillary and cervical adenitis require seldom or never any kind of depletion. In two cases only, in which active inflammation seemed to take place, we have applied leeches. Our usual treatment consisted in the application of camphorated oil, or of tincture of iodine in older cases, or of the following formula: Iodine $\frac{3}{4}$ *j.*, glycerine, volatile liniment $\frac{aa}{3}$ *ss.* In the very small number of cases in which suppuration took place we recommend early incision.

Finally, in cerebral affections, we know of nothing to recommend. Convulsions in the onset of the disease will generally not prove fatal; but such as occur after exhaustion and symptoms of dissolution of the blood have taken place, will prove the prelude to death.

Reports of Hospitals.

LONG ISLAND COLLEGE HOSPITAL.

EXAMPLES OF EPIPHYSEAL SEPARATIONS, WITH REMARKS BY PROF. FRANK H. HAMILTON.

[Reported by JOHN G. JOHNSON, M.D., one of the Surgeons to the Hospital.]

EPIPHYSEAL SEPARATION OF THE TIBIA, AT ITS LOWER END.

Case 1.—Bridget Melia, *set. 4.*, was received into the Hospital July 5, 1860, having fallen one hour before down a flight of steps. On examining the left leg a swelling was discovered about the ankle joint. Occasionally during the examination a distinct crepitus was detected in the vicinity of the joint; the crepitus being more like that occasioned by the friction of cartilage than of bone. It was soon ascertained that this sound proceeded from the lower end of the tibia, and that the lower epiphysis could be moved slightly upon the diaphysis. There was, however, no displacement, and the mother was directed to take the child home and put it in bed with the limb resting upon a pillow, no splints were to be employed.

One week later the child was brought before the class, when the limb was found to remain in line, and all crepitus had ceased. The ankle remained swollen as if from effusion into the joint. The same treatment was directed to be continued.

EPIPHYSEAL SEPARATION OF THE RADIUS AND ULNA AT THEIR LOWER ENDS.

Case 2.—John Burke, *set. 9.*, fell, striking upon the back of his right hand and wrist. He was seen on the following day by Dr. Dodge, one of the Dispensary Surgeons, who detected motion in both epiphyses accompanied with the peculiar crepitus belonging to epiphyseal separations. It was examined by several others, and Dr. Dodge regards the diagnosis as having been very perfectly made out. It was dressed with a palmar and dorsal splint, secured with a roller.

When brought before the class and seen by Dr. Hamilton three weeks had elapsed. The union was completed and the fragments were perfectly in place, no ankylosis. The splints were from this date discontinued. He was advised, however, to carry the arm in a sling for a few days.

Dr. Hamilton remarked, in connexion with this last case, that epiphyseal separations were probably rare accidents, belonging almost exclusively to the first ten or fifteen years of life, and especially to infancy. We must not always infer, because a separation has taken place near the junction of an epiphysis with the diaphysis that it is a decollation; after the second year of life it is much more likely to be a fracture than a decollation, nor is it generally easy to diagnose the accident even in infancy. The causes and symptoms are very nearly the same as those which belong to fractures; the diagnosis resting mainly upon the presence of a subdued crepitus, or, in some cases, a clicking sensation rather than a crepitus, like that which is produced when the broken ends of cartilage are made to slip upon each other.

In many of these cases the tendency to displacement is very slight; a fact which finds its explanation in the greater breadth of the bone at the point of separation, in the nearly transverse direction of the disjunction, and in the less degree of force which is requisite for the production of this accident. The treatment, therefore, is often very simple. The union occurs as promptly as in fractures. Dr. Hamilton has, however, seen one case of epiphyseal separation of the upper end of the humerus, in a child, 13 months old, which had not united five months after the accident and the child had not the power to lift the arm. It had been treated by an empiric, who regarded it as only a sprain.

NURSERY AND CHILD'S HOSPITAL.

CONVULSIONS, PLEURITIC ADHESIONS, SOFTENING OF THE INTESTINAL MUCOUS MEMBRANE.

[Under the care of Dr. Geo. A. PETERS.]

In the following case the symptoms indicated some serious alteration in the condition of the brain. The child had been losing flesh for a considerable period, was very fretful, and finally, within a few days of death, convulsions occurred. At the autopsy, there was no perceptible increase in the vascularity of the brain, no adventitious formation within its substance or upon its surface, and the only departure from a healthy state, was the presence of rather more serum than usual in the ventricles and sub-arachnoid space.

Case 2 of meningitis published in the *Times* for July 28th, showed us what extensive lesions might be found upon the brain of the child without convulsions. This case teaches that convulsions may occur daily, conjoined with other symptoms, which generally indicate the most serious disturbance of the brain, and yet this organ after death show few or no traces of disease. Both lungs were healthy and were readily inflated; but on the left side there were firm and extensive adhesions of the costal and pulmonary surfaces. The patient, during his last illness, did not have symptoms of pleurisy, and it is probable that this disease occurred at some previous period—quite likely before his admission into the hospital. Some writers have stated that primary pleurisy is very rare in infancy, but in this case there were no appearances of any other disease to which it could have been secondary. The mucous membrane of the stomach was of the usual color and firmness; that of the small and large intestines of a light hue—almost exsanguine, except in places which were moderately vascular; it could be detached by the back of the scalpel, and if scraped was nearly diffuent. The patches of Peyer were distinct, and could be detached with little force. This condition affected equally the different divisions of the intestines, and no ulcerations were observed. The autopsy was made too recently after death for us to suppose that this was a cadaveric change, and we, no doubt, have here one of those cases described by writers on diseases of infancy as white softening of the intestinal mucous surface. This lesion has been attributed to the action of the acids in the primæ viæ, to a sort of fermentation, and by others to defective alimentation. This patient had a poor and capricious appetite, often refusing a considerable part of his food, though prepared with care. The softening was, no doubt, connected with his imperfect nutrition, but its exact relation to it is not certain.

H. F., a male child, two years and three months old, entered the Hospital in June last in an emaciated state. He was placed with a wet-nurse, and, at first, there was apparently some improvement. Soon, however, the emaciation began to increase, and he grew very fretful, but no disease could be detected, he did not appear to be feverish, he had no cough, his respiration was regular, and the resonance, on percussion of the chest, was clear on both sides; he had no diarrhoea: on the other hand, there was a tendency to constipation; the appetite was changeable, and for the most part poor. About the 20th of July convulsions

set in, and, although he was treated promptly and watched with care, they recurred daily. On the 26th, when in one of these attacks, he suddenly expired.

Autopsy, 17 hours after death.—Rigor mortis marked, emaciation extreme; lungs of a light color and readily inflated; the left lung was detached with difficulty from the ribs on account of firm and pretty general fibrinous exudation; no serum in the pleural cavity; heart of usual appearance; foramen ovale and ductus arteriosus closed; from the latter a fibrinous plug was removed; weight of the liver $\frac{3}{4}$ xii.; this organ and the kidneys of usual appearance; mucous membrane of stomach healthy and firm; that of the small and large intestines light-colored, except in a few places which were moderately vascular; it was softened so as to be easily detached by the back of the scalpel, when it sometimes appeared almost pulpy; no ulcerations were noticed; the follicles were distinct, Peyer's patches unusually prominent, and participating in the general condition of the membrane. From half an ounce to an ounce of serum escaped from the ventricles and the base of the brain. The cerebral substance was of the ordinary color and consistency, and there was no thickening or vascularity of the enveloping membranes.

PENNSYLVANIA HOSPITAL.

[Service of Dr. LEVICK.]

Typhoid Fever.—By a happy coincidence, Dr. L. was enabled to present to the class three cases of this disease, in its three consecutive stages.

1. Sick seven days.—Great headaches and general soreness, for which he had been taking a solution of sulphate of morphia; and as a diaphoretic, the solution of the acetate of ammonia, in drachm doses every hour.

2. About the fourteenth day.—This man has a hemorrhagic diathesis; is flabby and weak; hence he takes ol. terebinth gtt. x. every two hours. He has had, also, from six to eight grains of quinia every day. For the diarrhoea, which became rather profuse, a pill, consisting of opium and ipecac aa gr. $\frac{1}{2}$ has been administered every three hours, together with laudanum enemata.

3. About the twenty-first day.—This patient had great nervous disturbance and evidences of miasmatic influence, but the use of sulph. of quinia at an early moment, in full doses, has completely checked it, though the fever has run on as usual. He next had a mixture of opium, ipecac, and blue mass, in small doses, for three or four days, not quite to the point of salivation. This was discontinued, and the tongue being dry, the turpentine is now being used.

All these cases were progressing finely, and presented no symptoms of an unfavorable prognosis.

Impending Tetanus.—A boy who had received a severe blow with the chime of a beer cask, had suffered a great deal of pain, which, under purging and opiates had subsided; but shortly he was attacked with stiffness of the joints, pain in the back and neck, a stiffness in speaking, producing the *risus sardonicus*. These symptoms causing a suspicion that tetanus was about to set in, he was immediately placed upon that treatment which has been found best in this institution, brandy and opium; half a grain of the latter every two or three hours; milk punch, made of one-third brandy was freely employed, and the result is a rapid improvement.

Pathological Specimen.—This was a case of ulceration of the rectum, terminating in perforation. The patient suffered great pain, with intense vomiting till death, which occurred in a convulsion. He had labored under an attack of diarrhoea, which suddenly ceased, and he became obstinately constipated, in spite of a great amount of drastic purging. After death an examination revealed peritonitis, with an effusion of lymph, pus, serum, and fecal matter. Just above the internal sphincter of the rectum, was seen a large perforation, the result of chronic inflammation and ulceration.

American Medical Times.

SATURDAY, AUGUST 18, 1860.

ANÆSTHETICS IN HOSPITAL PRACTICE.

THE discovery of anæsthetics was universally hailed as a great and unqualified blessing to man, the victim of unavoidable pain. The year of the announcement of the power of ether to render the patient insensible under the hand of the operator, was distinguished as the *annus mirabilis*; it began a new era in the history of operative surgery, and the older surgeon, in the language of the elder Warren, "wished again to go through his career under the new auspices." We can well imagine with what enthusiasm he who had been accustomed to struggle through difficult operations on patients forcibly held, now pursued his dissections as on the cadaver, and saw the patient, on the completion of the operation, suddenly restored to a full possession of all his faculties, as if by magic. And when, a year or more after these first experiments with ether, chloroform was introduced to notice, so agreeable to the senses, so prompt in its action, and so harmless in its effects, the perfection of anæsthetic agencies was thought to have been attained.

But every good must have its corresponding ill. It was soon announced that a lady, sitting in a dentist's chair, had suddenly expired while inhaling chloroform preparatory to the extraction of a tooth. A second, third, and fourth case was reported, and always previously to some trivial operation. The faith of its friends, however, remained unshaken, and these unfortunate results were attributed to the attending circumstances, and not to the anæsthetic. At length fatal cases began to occur occasionally in hospitals, in the presence of eminent physicians and surgeons, and in spite of their previous precautions, and efforts to resuscitate the victim. Finally, the fact seemed established beyond a peradventure, that chloroform is not an innocuous agent, even under circumstances apparently the most favorable for its administration, by the occurrence of a fatal case (in a dentist's chair, however), in spite of the persistent and well-directed efforts of Professor Simpson himself to restore animation.

It can now no longer be denied than anæsthetics are followed by unpleasant and occasionally fatal effects in a given number of instances. The latest statistics that have been published are as follows:—Total fatal cases in Europe, one hundred and twenty-five. When we take into account the aggregate of cases of anæsthetization during the last sixteen or seventeen years, of their almost universal use in hospitals, and in private practice, this mortality is a percentage of the whole number of cases, positively infinitesimal. It is doubtful if any active remedy of the *materia medica* can show a better record.

The recent death by chloroform in Bellevue Hospital has, we understand, raised the question in the Medical Board as to the propriety of allowing this agent to be longer employed for purposes of anæsthesia in that institution. Before this question can be properly decided, the comparative merits of ether and chloroform must be considered, for

anæsthetics in some form are now indispensable to the practice of operative surgery and midwifery, and can never be discarded, even though the mortality from their use were tenfold its present per centage. And before chloroform is stricken from the list, it were well to inquire as to the real sources of danger from its use, for if it is demonstrated that under certain circumstances it is as safe as any anæsthetic, every surgeon will, under such circumstances, prefer chloroform.

The comparative merits of ether and chloroform, as anæsthetics, it is not easy to decide. The statistics which we have given above show, that of the one hundred and twenty-five fatal cases from anæsthetics in Europe, twenty-five occurred during the inhalation of ether, and one hundred of chloroform, giving a mortality from the latter equal to four-fifths of all the cases. Although chloroform would seem by this exhibit to be the more fatal anæsthetic, yet a moment's reflection will convince any one that it may not even approximate the truth, for we have no knowledge of the per-centage of deaths to the number of cases of administration of either agent. It might, and probably would appear, could we sift this subject thoroughly, that chloroform had been given four times as often as ether during that period. We may, however, arrive at a very satisfactory conclusion as to the safety of chloroform, by taking the gross number of cases of its administration in certain well-authenticated instances, and noting the results. For example, it was given twenty-five thousand times by the French, in the Crimean war, without a single fatal issue. It is freely used in midwifery by many eminent English and American obstetricians, and, we believe, no fatal case has yet been reported in this department of practice. Professor Simpson is stated to have used from five to seven gallons annually for some thirteen years, without an unfavorable result.

The real sources of danger in the employment of chloroform have not been sufficiently studied. Authors mention:—1st, *A full stomach*; for vomiting being a common symptom in chloroform inhalation, the patient is liable to be suffocated. 2d, Affections of the nervous system, as delirium tremens, epilepsy, hysteria, etc. 3d, Affections of the vascular system, as fatty degeneration of the heart, atheromatous deposits, etc., etc. We do not propose to discuss these alleged contra-indications to the use of chloroform, as it is by no means as yet established how far these conditions are to be regarded as complicating its effects. We believe, however, that it was maintained by the late Dr. Snow, whose opinion on all subjects relating to chloroform is entitled to our confidence, that even when lesions of the nervous and vascular system do exist, chloroform properly administered, is far less dangerous than an operation without an anæsthetic. From some recent investigations as to the nature of death from chloroform, the following interesting facts appear:—1st, That the great majority of deaths (two-thirds) occur in slight operations, as those performed on sphincters, tendinous sheaths, strabismus, tooth-drawing, etc., etc., but few during the larger operations, as amputations, resections, ovariectomy, etc. 2d, In the majority of fatal cases by chloroform, death occurred before the operation,—during the first stage of inhalation—the stage of excitement. 3d, That the deaths that have occurred after the operation, and were attributable to the anæsthetic, have generally been when ether was slowly

administered, or ether and chloroform, but not pure chloroform. Without dwelling on these subjects, which are all of the deepest interest to those who are discussing the question of the relative or actual merits of the different anæsthetics, we shall allude to what we consider, if not the real, certainly a great source of danger in the use of anæsthetics in general, and chloroform in particular, in our hospitals. We refer to the gross and culpable carelessness of their administration. Rarely is the patient carefully examined by a competent person to determine if there be any contra-indication to the use of anæsthetics—a point that should never be neglected. The delicate and most responsible task of administering the agent is usually committed to a junior physician, who has no knowledge whatever of the nature of his duties; he knows nothing of the different stages through which the patient is to pass, or of the value of the symptoms which appear during the administration; his inhaler is a towel well saturated, and his directions often are to apply it directly to the face. The stage of *profound coma* having been reached, the operator seizes the scalpel, and all eyes are directed to its movements; the innocent junior, all absorbed in the operation, forgets his duty, unconsciously drops the towel upon the patient's face, and occasionally adds the weight of his body, to its suffocating effect, as he leans forward in the anxious pursuit of knowledge. At length a moan, or the collapse of the jetting arteries, or the suggestion of a bystander more interested in the sufferer than the operation, recalls attention to the condition of the patient. Naturally enough he has ceased to breathe; the operation is suspended; the messenger is despatched for brandy; and in the meantime artificial respiration by the most improved method is attempted by every available means. Fortunately the patient is generally resuscitated, at least sufficiently to have the operation completed, and be taken to the ward.

We do not here give an overdrawn picture, for such scenes if haply not more unpleasant, may be witnessed in our hospitals almost weekly. The reform should commence with the mode of administration of these agents. A medical man of known ability should be selected to administer the anæsthetic; we say medical man, because he will not become so much interested in the operation as to forget his duties. To his care should be committed, so far as practicable, every patient who is about to submit to an operation. This is but that precaution which every surgeon exercises in private practice, and hence the few cases of deaths from anæsthetics which occur outside of our hospitals. If this degree of care is exercised in our hospitals and still fatal consequences follow the use of ether or chloroform, or both, the question may well be raised as to the propriety of rejecting the more dangerous.

THE WEEK.

THE numerous cases of typhus fever that have occurred among recently landed immigrants, have awakened public inquiry regarding the progress of the fever, the duty of our sanitary officers, and the nature and extent of the existing facilities for the care of such patients. Having been favored with an opportunity of seeing the cases that have appeared among the *Cynosure's* passengers, we are happy to report that all those which have been admitted to the

Immigrants' Hospital at Ward's Island, are now convalescent. Though the fever has been of a severe type in a number of the cases, it has proved fatal in none. There is no doubt that this malady is true typhus, and that it is capable of repropagation by personal infection; but it is a fact that, up to Saturday last, the fifty cases in the hospitals on Ward's Island had failed to disseminate the fever to a single individual, thus illustrating anew, and very forcibly, the great utility of ventilation and cleanliness in preventing the propagation of the typhus infection. It is yet to be seen how many "fever nests" have been established in the city lodging and tenement houses, where the blessings of pure air, free sunlight, and cleanliness are seldom enjoyed, and never enforced. Let it be borne in mind that the existence of any number of Fever Hospitals at the Quarantine Station would not in the least diminish the liability to the recurrence of just such cases as this of the *Cynosure*. And until the good time arrives when, under the influence of general intelligence, or an efficient Sanitary Code, the causes and conditions of infectious febrile propagation shall be removed, nothing but the establishment of suitable Fever Hospitals and Reception Houses in the city, and the preparation of proper Fever Hospitals on Randall's or Ward's Island, will effectually provide against the liabilities to the diffusion and repropagation of fever poisons in the densely populated districts of the city.

THE question as to the power of courts to compel the medical witness to disclose facts confided to him in his professional capacity, has long been of extreme interest to medical jurists. The common law takes cognizance only of the confidence between man and wife, and attorney and client, and admits this only to a limited extent. Accordingly, the courts of England have compelled medical witnesses to testify without reserve. In several of the United States, however, statutory provisions are made protecting the medical witness in refusing to "disclose any information which he may have acquired in attending any patient in a professional capacity, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon." Where this special statute does not exist the medical witness has been supposed to be placed upon the same footing with ordinary witnesses, by the common law. But, in a recent trial in the Muskingum County Pleas, Ohio, we learn, from the *Columbus Review*, that "the question arose as to the power of the courts to compel a medical witness to give testimony involving a breach of professional confidence. After being fully argued, the court (Judge Marsh presiding) held that a medical witness could not be compelled to disclose facts confided to him in his professional capacity." We shall look with interest for the promised report of the arguments on this question, and the decision of the judge.

THE COMMISSIONERS appointed by the last legislation to examine into the question of the actual loss sustained by individuals at the destruction of the Quarantine Hospitals by fire have made their awards. The following are the claims of the medical officers, and the amounts allowed by the commission:—Dr. Richard H. Thompson, health officer, claim, \$19,500, allowed, \$5,106 05; Dr. D. H. Bissell, claim, \$6,565 55, allowed, \$716 95; Dr. T. W. Walser, assistant physician, claim, \$6,225, allowed, \$255 64; Dr. C. C. Waller, deputy, claim, \$7,300, allowed, \$502 52.

Reviews.

ON OBSCURE DISEASES OF THE BRAIN, AND DISORDERS OF THE MIND: THEIR INCIPIENT SYMPTOMS, PATHOLOGY DIAGNOSIS, TREATMENT, AND PROPHYLAXIS. By FORBES WINSLOW, M.D. Philadelphia: Blanchard & Lea. 1860. 8vo. pp. 576.

(Continued from page 108.)

On the subject of *legal evidence*, in alleged lunacy, Dr. Winslow is so universally recognised as high authority, that his pertinent and logical suggestions under that head will be profitably pondered by both the expert and the jurist. We heartily coincide in the following remark:—

"The coarser and more demonstrative symptoms of insanity are obviously patent to men of common intelligence, and ordinary knowledge, but the less manifested, more obscure and *hidden* types of mental disease, require for their satisfactory elucidation, an intimate and profound acquaintance with the physiology, as well as pathology of the human mind. Without the aid of the testimony of experienced witnesses, juries are much more likely to arrive at a wrong, than a right conclusion. It is irrational to expect any other result, when we consider the great and peculiar difficulties with which they have generally to combat, when subtle, and disputed forms of criminal insanity, are submitted to their consideration and decision."

The first seven chapters of Dr. Winslow's book should be read and pondered by every jurymen, every lawyer, and every judge in our country. Justice and mercy alike demand radical reforms in the management of both the innocent and the criminal insane. And though it is the glory of the State of New York to have instituted the first great Asylum for Insane Convicts, we yet have no Commission of Lunacy, and no other general means for securing the insane from abuses and injustice than such as chance to exist in connexion with an elective judiciary, unlearned boards of supervisors, or ignorant juries. If the general perusal of Dr. Winslow's book by our medical brethren should be the means of awakening sufficient interest upon this subject to procure the establishment of such commissions of lunacy as the interests of justice and humanity require in the several states, he would certainly be regarded as a great public benefactor to the people of our country.

The readers of this volume will be struck with the author's distinct and fearless enunciation of those truths which relate to the moral and religious nature of man. With all that pity and apology for the insane which characterizes Dr. Winslow's writings, he scrupulously guards against a loose interpretation of moral obligation and responsibility that would cloak with irresponsible innocence the soul that sins against itself, its fellow-beings, and its God. In the chapter on the stage of conscious insanity and the insidious advances of morbid thought, as well as in other sections of the treatise, are found lessons that should be indelibly impressed upon the mind of every parent and every teacher—aye, upon every rational mind; and we beg those readers who may be startled at the author's bold advocacy of radical reforms, in both the penal and the medical management of disordered minds, to study very attentively these sections on the moral causes and relations of insanity.

The great importance of scrupulously avoiding even the appearance of any concessions to that mawkish and dangerous sentiment of false charity which would apologize for

human depravity, and cloak even the sin of disregarding or of voluntarily stupefying the moral sense and the voice of conscience, warrants a friendly criticism of one feature of Dr. Winslow's writings. Laboring to find suitable expressions for certain admitted facts relating to the state of the moral sense in particular conditions of mental disorder, he makes use of the following very significant terms—"profound *anaesthesia* of the moral sense"—"*a paralysis of the moral sense*." Cannot safer expressions be found for designating the morbid psychological states to which this distinguished writer has assigned those exceedingly significant but excessively strong designations? Enlightened physicians will not need better terms; but let it not be charged upon medical psychologists that they overlook man's moral accountability while God holds him responsible for his acts.

The limits assigned for this notice of the treatise before us forbid anything like a complete analysis of its twenty-five chapters; but we would briefly glance at a few salient points in the work. The rich illustrations abounding in every chapter, and all from life-scenes, we need not refer to. They are most appositely and inductively wrought into the very framework of every section—or, rather, it may be said, that the author's and the reader's deductions flow most naturally and complete from the happy and logical collation of those simple facts as presented in each chapter of the book. We quote the following passages:—

"There is, alas! in existence a frightful amount of 'unrecognised and untreated mental depression associated with suicidal impulses.' * * * 'If the evidence generally adduced at the coroner's inquest is to be credited, in nearly every case of suicide, cerebral disorder has exhibited itself, and the mind has been clearly and palpably deranged. In many cases, the mental disorder had clearly existed for weeks, and, occasionally, for months, without giving rise to the suspicion of the presence of any dangerous degree of brain or psychical disturbance likely to lead to so disastrous an issue. There are few morbid mental conditions so fatal in their results as these apparently trifling, evanescent, and occasionally fugitive attacks of depression.'"

Again, under the head of Causes and Conditions of Impairment of Mind:—

"Irregularities of thought are frequently *self-created*, often owing their existence to an obstinate determination on the part of the patient to succumb to their fascinating and seductive influence." * * * "Indulgence in a state of *morbid reverie*, or disposition to 'build castles in the air,' is fraught with serious mischief to the mind. Excessive, continuous, and prolonged reverie is often precursory of softening of the brain, and is also a symptom commonly observed in the incipient stages of some types of mental disorder. Hence the great value, in early education, of carefully regulating, directing, disciplining, and mastering the attention, thus fitting and training the mind to combat successfully with those mental influences and physical states of ill health which, when uncontrolled and unsubdued, so often sap and undermine its energies, prostrate and destroy its powers." * * * "The fearful mischief that ensues from neglecting, by resolute mental efforts, to battle with the erratic suggestions of an unduly excited and flighty imagination, to keep in abeyance, and even to strangle in their birth, unhealthy impressions struggling to fix and engraft themselves upon the easily moulded, plastic, and yielding fancy, cannot be over-estimated, or exaggerated."

Five chapters are devoted to the Morbid Phenomena of Memory—embracing a most philosophical review of facts relating to its psychology and its pathology. Five chapters are also devoted to the description and review of *somatic*

(bodily) phenomena, attendant upon and indicative of mental or cerebral diseases, embracing the facts relating to morbid conditions of the special senses, etc., speech, sensation, and muscular motion. A chapter is also devoted to the morbid phenomena of sleep and dreaming, and another very important one discusses those of organic and nutritive life. In the last sixty pages of the treatise are discussed the principles of pathology, diagnosis, treatment, and prophylaxis of mental disorders; and in no other treatise have we found embodied so much and such practically valuable instruction in a single chapter; indeed every chapter in this volume is incomparable with any other treatise in those respects. Every page is replete with interesting illustrations and suggestive thought; and the entire treatise is woven so connectedly, so naturally, and with such classical elegance of style—imbued with reverential and Christian feeling, that it cannot fail to command the attention and deeply impress the mind of every reader. For these reasons, and for the great good the book will do, not only for minds diseased, but to the inner life of every reader, we most heartily commend the volume to physicians and all classes of educated men. For, added to all its life-like illustrations relating to the symptoms, progress, pathology, and treatment of cerebral and mental disorders, the author has faithfully arrayed those fundamental truths which relate to the moral and the mentally reactive causes of insanity. This is a subject which every educated mind should be made to comprehend. The time has come when, with the light that now exists, an intelligent person may not innocently pursue those courses of life, and indulge in those habits of mind and feeling which tend to induce psychical or physical disorder. And Dr. Winslow does not hesitate to assert, upon evidence, that "the mischievous influence of moral agencies is exercised upon the *physical* as well as the *psychical* organism, laying the foundation of lesions of structure and perversions of thought originating in the mind itself." It is true that we have to deal with insanity as a disease involving both the body and the mind, but all should remember that not unfrequently the insane may be morally responsible for the calamity that has laid their godlike power in ruins. How true it is that "power of self-control is, in many instances, weakened, or altogether lost, by a voluntary and criminal indulgence in a train of thought which it was the duty of the individual, in the *first* instance, to resolutely withstand, control, and subdue." In reference to this subject it is manifestly the duty, not only of physicians, but of all educated persons, scrupulously to inculcate in others, and particularly in the youth, as well as conscientiously observe and practice in their own daily life—the principles of sound mental Hygiene.

A PRECOCIOUS MOTHER.—There was one case during the year worthy of especial notice, in consequence of the extreme youth of the mother. Elizabeth D— was born of native parents, in the almshouse at Taunton, May 24, 1847, and at the same place she became the mother of a healthy boy, on the first day of February, 1858, being only *ten years eight months and seven days old*. This appears to be a rare case in this climate, but is well attested by the physician (Dr. A. Baylies) of the almshouse at Taunton, who officiated professionally both at the birth of the young mother, and at that of her "hopeful son." This boy weighed eight pounds at birth, and at the age of eighteen months it weighed 37½ pounds, and was in the enjoyment of robust health.—*Mass. Registration Report.*

Reports of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

Dr. GEO. WILKES, President, in the Chair.

FEB. 4TH, 1866.

DISCUSSION ON DIPHTHERIA.

(Continued from page 104.)

Dr. WATSON did not think that the prevailing epidemic corresponded, in its general character, with the form of disease described by Brettoneau, but that the majority of cases resembled the "croupy, sore throat" referred to by Fothergill. He had seen a great many such, but had not met with a single fatal case. His treatment was mostly expectant; sp. mind. or Dover's powder for the fever, and camphorated oil for an outside local application. The disease, in several instances, ran through whole families. He remarked that he had met with the membrane which had been described as diphtheritic, covering an abraded surface and associated with typhoid symptoms, a condition which he was disposed to think depended upon the breathing of foul air.

Dr. CLARK stated, that in the cases he saw the appearances and general characters of the disease corresponded exactly with Brettoneau's description.

FEB. 18TH.

Dr. COCK remarked that since the middle of the month previous he had seen some six or seven cases of diphtheria, but none terminated fatally. In a child, who was one out of four attacked in the same family, the exudation cleared off several times to be brought back again by some error in diet. The treatment was tonic in its character, consisting of chlorate of potash, quinine, beef tea, and wine whey. The ages ranged from five to forty years. During his term of service (Dec. and Jan.) at the New York Hospital, he had noticed among the patients a more than ordinary exemption from sore throats in any shape. In all the cases the membrane was present, was about one half a line in thickness, and could be likened, in general appearance and color, to buckskin. In reply to a question from Dr. Wilkes, he remarked that, in the majority of cases, the symptoms of marked prostration were absent.

Dr. MARKOX stated, that with the exception of two fatal cases, which he had seen in the early part of the last year, he had been fortunate enough not to meet with any cases of diphtheria.

Dr. ROBT. WATTS remarked that he had seen five unequivocal cases of the disease in question, and of these but one was fatal in its issue. This last-mentioned one terminated at the end of the third day after the attack. The patient was a little child fifteen months old; the membrane commenced forming in the fauces, and extended into the trachea, bronchial tubes and oesophagus. Two of the cases occurred in one family, in both the membrane was well marked, and the attack was ushered in by vomiting, very much after the fashion of the invasion of scarlet fever. The fever which followed was also very high in both instances, and during the first forty-eight hours the pulse ranged from 130 to 140 per minute. In each case the deposit disappeared on the fifth day, and left behind a red surface which had a strawberry roughness. Another case occurred in a boy seven years of age, who was taken sick on the 15th of January with chills; on the third day after a membranous patch appeared upon the tonsil of the right side. The fever in this case was also very high, the pulse for three or four days keeping at 130 or 140. On the fourth day the child was seen by Dr. Clark, in consultation, and afterwards by Dr. Parker; both gentlemen pronounced it an unequivocal case of diphtheria. In the course of the seventh day the

deposit extended over the uvula, a day or two after that across to the other tonsil, and on the fifteenth day disappeared entirely. The nasal passages were very much involved, the discharge was very considerable in quantity and of an acrid character; the glands of the neck were much enlarged and were quite painful on pressure; this condition of things was also noticed in two other cases. In another case, a small patch which showed itself on one tonsil disappeared on the fifth day. The treatment in all, was from the start, tonic in its character; wine, brandy, quinine, and chlorate of potash were freely given, but, with one exception, no local application was made. The boy, seven years of age, already referred to, took a *quart bottle of sherry wine every twenty-four hours*, and a grain of quinine every two hours. On the evening of the third day, he having vomited considerably, the wine was stopped and about one half the quantity of brandy given instead. The vomiting ceased, but in the following afternoon he was taken with what, under other circumstances, would have been called dysentery, the symptoms of that affection, tenesmus and bloody stools, being present. Dr. Watts was inclined to the belief that the epidemic sore throat was but a milder type of diphtheria, certainly the symptoms of the two bore a striking resemblance to each other. He was not disposed to speak of the mild forms as cases of tonsillitis, inasmuch as in very many, those organs were not swelled at all, neither was there any swelling of the mucous membrane of the throat generally.

Dr. PARKER entirely agreed with these views, and thought that such cases would, if left alone, be very apt to terminate in true diphtheria.

Dr. MARKOE had been in the habit for weeks past of seeing a great many cases of sore throat, but had not met with a single fatal case. The attack would be ushered in by a chill, which would be followed in the evening by a very high fever, and, at the same time, the throat would be complained of. On examination of the parts, both tonsils would be found enlarged, and covered over with a yellowish gelatinous substance presenting a dotted appearance. The second day the patient would be feverish, and in the evening there would be a marked remission. The symptoms then began to subside, and on the fourth day the case terminated favorably. Dr. M. stated that the fever was out of all proportion to the severity of the disease, in fact it was the symptom. No treatment was required. The form of disease referred to was a precise transcript of what he had been in the habit of seeing for the last twelve years. In answer to a question from Dr. Clark he stated that cough was not a marked symptom.

Dr. PARKER had also seen several cases of that form of disease within the past year. The treatment was expectant, and the patients all recovered.

Dr. CLARK not being in family practice, had not had many opportunities of meeting with the disease, but in the few which had come to his notice a cough existed which lasted for a week or ten days after all the other symptoms had disappeared.

Dr. DU BOIS had also seen several of those cases referred to by Dr. Markoe, and like him had never met with a fatal result. It was an astonishing fact to him that so much constitutional trouble should be caused by such a small amount of disease in the throat.

Dr. CLARK stated that he had seen but one additional case of diphtheria since the last meeting. A child, a patient of Dr. Bishop, was recovering from a pretty severe attack of scarlet fever, which was attended with a considerable amount of sore throat, and swelling of the glands in the neighborhood of the angle of the jaw. All these symptoms were subsiding when diphtheria made its appearance, and on the second or third day after the membrane had formed,—Dr. Clark saw the case in consultation. Then there had been already a slough on the outside of the neck just under the angle of the jaw as large as a two-shilling piece, and extending from the edges of which was a patch of erysipelatous inflammation covering over a space of three

inches in one direction and two in another. The base of this ulcer was covered with a thick grey membranous matter, notwithstanding the parts were entirely denuded only twenty hours before. In the throat, the tonsils were seen filling up on each side of the fauces to the level of the tip of the velum, and all along the border of the arch thus formed there was a perfectly white exudation, which it was pretty evident from the character of the breathing, and tone of the cry, extended into the larynx. The attendant constitutional symptoms were all pretty severe when he last saw the case, and he had very little doubt but that it had terminated fatally. No suppuration preceded the slough, the dead mass seemed to drop out as if it was nothing more than a plug.

MARCH 2d, 1880.

Dr. ALLIN stated that he had seen, within the past four weeks, seven additional cases of the disease under discussion, but they were all of a mild type. Two of these occurred in one of the families in which he had a fatal case a short time previously. They were both attacked about the same time with sore throat, and both presented small patches of exudation upon the tonsils; very little fever was present in either case. The treatment employed was the local application of the solution of the hydrochlorate of potash, and hydrochloric acid, the latter being decidedly in excess. Of the five other cases, one was very slight in character, the severity of the disease spending itself in five days. The remaining four occurred all at one time. One was a child three years old, who was a patient of Dr. Bloodgood. During the convalescence, from an attack of measles, an ulcer appeared on the inside of the lower lip, and at the same time, the throat being inspected, the existence of exudation, which covered almost the entire surface of the left tonsil, was detected. The pulse increased in frequency from eighty to one hundred and twenty, and the child complained of a good deal of difficulty in swallowing. On the morning following, membrane was found covering the velum and other tonsil. On the third day after the attack, Dr. Allin saw the case in consultation, when a teaspoonful of the following mixture was given every two hours:—Chlorate potash 3 ii.; hydrochloric acid, 3 i.; water 3 iv. This, together with the local application of the dilute hydrochloric acid, in the proportion of one to four, completed the treatment. The disease continued for four days before any marked change for the better was noticed, and at the end of that time the membrane began to disappear. When this had taken place the child was seized with hoarseness, which very soon terminated in complete aphonia. The remedies previously alluded to were then stopped, and spirits of turpentine, in doses of three drops every two hours was given instead. A change for the better showed itself, and the child was not long in getting entirely well. Another case was in the immediate neighbourhood; a girl fourteen years of age, a patient of Dr. Bloodgood, was suffering from phlegmonous inflammation of both legs for ten days, when she was seized with a sore throat, which was attended with the existence of the exudation on one tonsil. The chlorate of potash mixture was all that was given in this case, and the membrane cleared off entirely in the course of the following nine days. The sixth case was entirely uncomplicated, the extent of the membrane being limited to a small portion of the left tonsil. The treatment and result was the same as in the previous instance. The last case was, at the time of making the report, still under treatment. The patient was a child, five months old, who presented patches of membranes upon the tongue, roof of mouth, and tonsils; there also existed a considerable amount of tumefaction externally. The mixture of chlorate of potash and hydrochloric acid was being resorted to in this instance, and the result promised to be a good one.* In conclusion, Dr. Allin remarked, that he was led to place a good deal of confidence in the mixture so often alluded to, its administration thus

* This case was also successful.

far having been attended in every case with complete success.

Dr. JAS. R. WOOD cited the history of the following case of diphtheria which he was then attending:—The patient was a lady, whom he had first seen about ten days before; the membrane coated the fauces and extended down the pharynx as far as he could see, the air tubes, however, were not involved. She was then very much prostrated, with a pulse one hundred and thirty, was restless, and apparently indifferent to everything about her. I commenced the treatment of the case, continued he, by the internal use of the chlorate of potash, in doses of six grains every two hours, together with three grains of quinine every three hours. Milk punch was given freely, and a gargle was used of a drachm of nitrous acid to eight ounces of water, while the parts were also pencilled over by the same solution. This woman sank very rapidly for the first twelve hours, but on the next morning the membrane began to loosen, at the same time the pulse became less frequent. On the second day the membrane began to separate in large patches, one of which, from the right side of the fauces, was the size of half-a-dollar; another patch was about twice the natural size of the uvula. Dr. Wood stated that he also attended a gentleman who had been sick when first seen, about three days. There was a good deal of exhaustion present, together with a slight stridulous cough. The throat was lined with a dark, dingy-colored membrane, which had very much the appearance of a piece of old parchment. The treatment was the same as in the former case, and the recovery was very tedious. He had also treated a case of the variety of sore throat referred to by Dr. Markoe; the affected parts were covered with exudation, which was entirely different in appearance from the membrane of diphtheria. Stimulants and chlorate of potash were freely given, and nitrate of silver in solution was applied locally. Dr. Wood had also seen two cases of fatal diphtheria in consultation, but they were so far gone at the time, as to give no hopes for recovery. In conclusion, he expressed himself strongly in favor of the supporting treatment, maintaining that it was the only true way of combating this formidable disease, and that all other medication was of secondary importance.

Dr. VAN BUREN stated that he had met with several cases of diphtheria. He was impressed with the fact that there was a certain amount of epidemic influence prevalent in the community in connexion with the development of the disease, that the malady was mild in character, and except in a few instances, where its fatal tendency was favored by the existence of a bad constitution, or by the fact that children were affected, it had not with him amounted to a great deal. In two families he had seen four deaths occur in one and three in another, all due to prostration. The treatment he relied upon, was the administration of chlorate of potash and quinine in large doses, together with good diet, beef tea, and the like. To one child, who recovered, three grains of quinine were given every two hours during the day, and a greater part of the night, for a whole week; and notwithstanding the patient was but five years old there were not the slightest evidences present of the specific action of the remedy. He also referred to the two following cases, which were of considerable interest:—The first was one of diphtheria, which followed after the sore throat of scarlet fever, and to which he was called in consultation when the little patient was very far gone. At the urgent request of the attending physician and the family, tracheotomy was performed. As soon as the windpipe was opened a large amount of membrane presented itself, a considerable portion of which was removed by the forceps. The case terminated fatally in a paroxysm of suffocation twenty-three hours after the operation was performed. The second case he was called to was the son of one of his colleagues, who was first attacked with inflammation and swelling of the left eyelid. The diseased action seemed to be confined to the meibomian follicles, but when the lower lid was everted the palpebral conjunctiva was found to be

covered with exudation. The next morning the nostril of that side was occluded, and on inspection of the parts membrane could be distinctly seen partially covering the surface of the mucous membrane. During his whole sickness the patient was able to be about, and recovery took place about a week after he was attacked.

Dr. WATSON wished to call attention to the frequent occurrence of glandular swellings in diphtheria; he had met with three cases of that character which occurred in one family, and in two of these the swellings suppurated. He referred in conclusion to two additional cases of diphtheria, which had occurred to him since the last meeting. One of these was a child three years of age, who, when first seen, had been sick for three or four days, and was then suffering from the symptoms of croup. No membrane could be discovered in the throat until two days after, when it rapidly extended into the larynx, causing death by dyspnoea. The second case was a child of a medical friend seen in consultation. It was very mild in character; and terminated favorably.

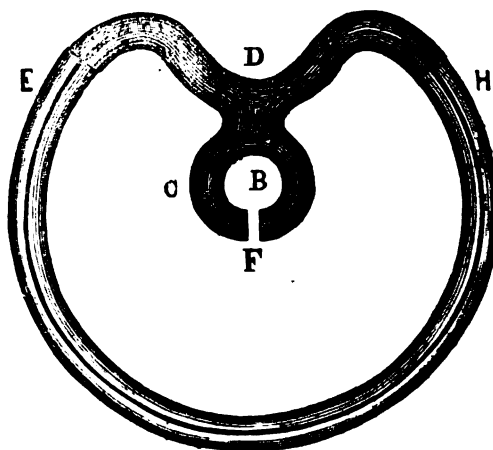
NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, AUGUST 1st, 1866.

JOHN WATSON, M.D., President, in the Chair.

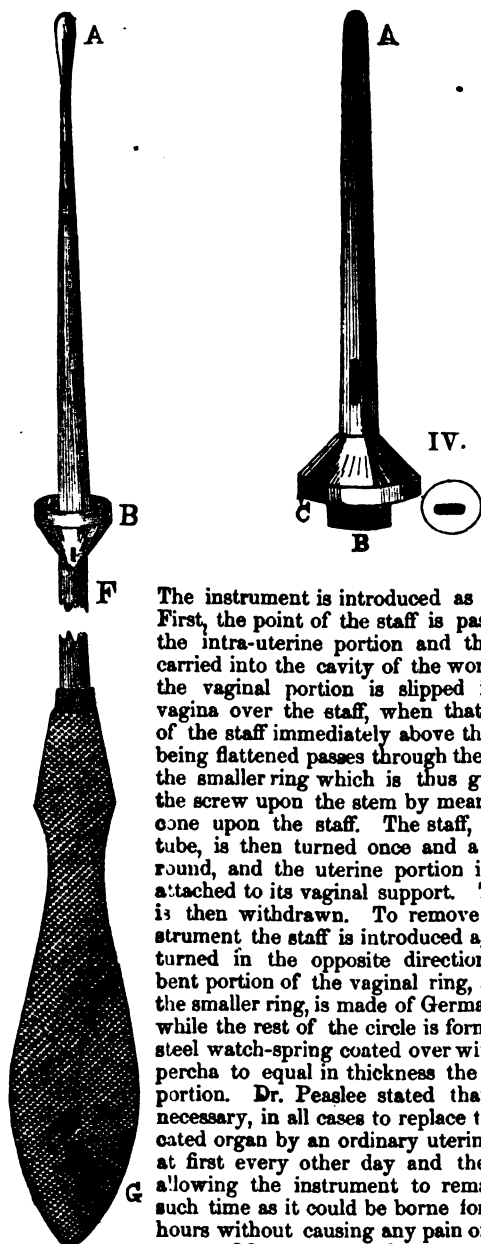
INTRA-UTERINE PESSARY.

Dr. E. R. PEASLEE exhibited an intra-uterine pessary which he had devised for the radical treatment of retroflexion. The instrument consists of three portions. 1. A silver stem for the uterine cavity. 2. A modified ring, the vaginal portion. 3. A steel staff for the purpose of introducing the two. The stem is of pure silver, is hollow, from two and a half to two and three-fourth inches in length and about three-sixteenths of an inch in diameter; one extremity is blunt, and the other is expanded into a cone (of German silver) at the base of which is a screw. The diameter of this screw is somewhat less than the base upon which it rests, and the opening through it into the tube is oval. The staff is probe-pointed, eight and a half inches long, and near its handle, at a distance from the point equal to the length of the stem, is an inverted cone, the base of



which has the exact diameter of the screw alluded to. The portions of the staff above and below the cone are flattened. Lastly we have the vaginal portion, which varies in diameter according to the size of the canal into which it is to be introduced. This ring, at one part of its circumference, is bent towards its centre in order to prevent any pressure upon the urethra when the instrument is in place. At the

greatest point of convexity of this curve there is another ring on the same plane, which forms a female screw to fit exactly the thread upon the stem. The diameter of the ring corresponds with that of the base of the cone upon the stem, and at one point of its circumference there is a deficiency or slot. At the upper and lower extremities of the stem are openings, as in a catheter, for the escape of fluids.



The instrument is introduced as follows: First, the point of the staff is passed into the intra-uterine portion and the latter carried into the cavity of the womb, next the vaginal portion is slipped into the vagina over the staff, when that portion of the staff immediately above the handle being flattened passes through the slot into the smaller ring which is thus guided to the screw upon the stem by means of the cone upon the staff. The staff, with the tube, is then turned once and a quarter round, and the uterine portion is firmly attached to its vaginal support. The staff is then withdrawn. To remove the instrument the staff is introduced again and turned in the opposite direction. The bent portion of the vaginal ring, and also the smaller ring, is made of German silver, while the rest of the circle is formed by a steel watch-spring coated over with gutta-percha to equal in thickness the metallic portion. Dr. Peaslee stated that it was necessary, in all cases to replace the dislocated organ by an ordinary uterine sound, at first every other day and then daily, allowing the instrument to remain until such time as it could be borne for several hours without causing any pain or uneasiness. Of course no such measures should

be resorted to if the organ is inflamed, or its mucous membrane over sensitive. He had been in the habit of using the instrument for the last four years, and had always been successful in his results, not unfrequently the feces in passing through the rectum, presses against the ring and causes it to be displaced, but this can easily be remedied by bending the watch-spring (by means of heat) and thus allowing for the increase in the volume of the gut at such times. He urged the necessity of examining the instrument every two or three days after it was first applied, and if any irritation existed, to remove it for a day or two; he, however, had met with a case where it was worn for sixteen weeks in

succession, without any unpleasant symptoms. The instrument has the following advantages:—1. It is easy of application. 2. The vaginal portion being elastic, allows the uterus to yield readily to any sudden pressure from above. 3. It does away with all external appliances.

On motion of Dr. GARDNER the subject was laid over until the first meeting in October.

Dr. WATSON read an obituary notice of Dr. Robt. Ray, who was a member of the Academy.

DIPHTHERIA.

Dr. WATSON also read a paper on the "Epidemic Sore Throat," prevailing in New York, in 1859-60, of which the following is an abstract:—Sore throat of a peculiar type, but having the general features of diphtheria, began in this city about October 1st, 1859, and prevailed as an epidemic until June, 1860. Dr. W. had, in his own practice, during that period, one hundred and forty-eight cases, distributed over the several months as follows: Six in October; fifteen in November; fourteen in December; forty-eight in January; twenty-two in February; twenty-three in March; eight in April; nine in May; one in June; two in July. No noticeable meteorological conditions were associated with the epidemic; it had been prevailing in other parts of the State during the preceding year, in localities exposed to various atmospheric vicissitudes; nor could it be traced to peculiarities of in-door life as it occurred alike among the rich and the poor, the old and the young. The disease had been variously named by practitioners; by some it was called diphtheria; by others, especially when the membranes did not appear, it was ascribed to scarlatina, influenza, croup, mumps. Dr. W. was disposed to take a middle ground, and regard many of the diseases occurring during the epidemic as modified by its influence. He does not regard it safe to say, that because false membrane did not appear in every given case, the disease was not diphtheria, for oftentimes its appearance is of very limited duration and may have escaped notice, etc. Again, the surfaces on which the membrane may appear are not all exposed to observation. He had watched its progress through families and observed that in some of the members the exudation appeared, and in others it did not. The disease differed from scarlatina in the absence of the strawberry appearance of the tongue, in non-exfoliation of the cuticle, and in freedom from nephritic symptoms. It also occasionally preceded or followed an attack of scarlatina. The croup attending this disease differed from sporadic croup in being of a more decidedly adynamic type, and tending to death by collapse instead of apnoea, or pulmonary congestion. The renewal of the membrane after its removal Dr. W. has rarely seen, nor has he met with paralysis as a sequel of the disease; cases of loss of power over the muscles of the soft palate leading to defect of speech and regurgitation of fluids he has seen, but considers this condition due to the previous inflammation and interstitial exudation—the muscles in time recover their functions. The communicability of the disease from person to person could scarcely be doubted. The mortality in Dr. W.'s practice was very small; of those exclusively under his own care, but two proved fatal. The entire number of cases which he had met with during the epidemic, amounted to two hundred and forty-eight, and of these but six died, a mortality not equal to two and a half per cent. The treatment pursued was expectant and alexipharmic; a stimulating and detergent gargle for the throat was generally advised, as claret wine, sage tea with yeast, tincture of myrrh in mucilage, or chlorate of potassa in solution; the stronger caustics he never resorted to, not even the nitrate of silver; acetic acid, full strength, was occasionally applied for its effect in stimulating the diseased surfaces without destroying the living textures; the glandular swellings were treated with gentle frictions with camphorated oil; if indolent, tincture of iodine and soap liniment, one part of the former to seven of the latter was applied; if acute and suppuration threatened, the water poultice was applied. The general treat-

ment was tonics, due attention being given to the digestive organs, the secretions and excretions. The paper contained a very perfect symptomatology of diphtheria, and was illustrated by numerous reported cases.

General Correspondence.

COMPARATIVE PATHOLOGY;—THE MASSACHUSETTS EPIZOOTIC.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The great value and importance of comparative physiology, in elucidating the physiology of man, is, at the present day, universally admitted. Without experiments on the lower animals, Harvey could never have demonstrated the circulation of the blood as now understood; and Dr. Marshall Hall would never have even suspected the reflex or diastolic function of the spinal cord. For it was while experimenting for an entirely different purpose upon the proteus, that the latter made the most important physiological discovery of the present century.

But comparative pathology is almost entirely ignored by medical men. And yet there is no reason, *a priori*, why the pathology of the lower animals should not throw as much light on human pathology, as has its all department of science, above mentioned, upon human physiology. On the contrary, there is ample reason for the belief that the same amount of investigation would yield results to the medical practitioner even more important and valuable. For a science of comparative therapeutics may be formed upon that of comparative pathology as its basis; and then the former may be applied in illustration, and to the extension of human therapeutics. Not that a particular remedial agent will of course have the same effect upon the human organism which it has been proved experimentally to produce in a lower animal. Aconite is eaten with impunity by the horse, hemlock by the goat, belladonna by the rabbit, and nuxvomica by a species of buzzard; but all these are poisons, except in minute quantity, to man. On the other hand, parley is a poison to the parrot, and food to man. Nor, if we know the proportionate doses of a particular medicinal agent for man, and a particular species of the lower animals, can we infer the proportions required of another remedy. The horse requires ten to twelve times as much aloes for a dose as a man; but the latter cannot tolerate one-tenth of the amount of arsenic which is appropriate to a horse. Still, comparative therapeutical experiments are always suggestive; and sometimes lead us, as it were, by a thread, to use one of Sydenham's expressions, to some important practical fact or principle in human therapeutics. For instance, the effects of arsenic in improving the external appearance of horses, suggests the idea that it may be found a valuable remedy in certain diseases of the human skin; and experience demonstrates this to be the fact.

Thus the most reliable method of advancing the science of human therapeutics, next to direct experiment on man, is therapeutical experimentation on the lower animals in known pathological conditions. It is in fact in this way that we have acquired most of our knowledge of the antidotes to the various poisons; and even the discovery of vaccination, by Jenner, was the result of his investigation of a pathological condition of a lower animal.

We will not, however, prolong our remarks on the importance to medical men of comparative pathology. But there is another point of view in which this subject assumes the gravest importance to the community and to the commonwealth. Some of the diseases of the lower animals are epidemic in their nature, and cause a great pecuniary loss to the owners of the animals infected by them; as is the case with the glanders in horses, the rot in sheep, and murrain in cattle. Nor is this all. In case of the ox and

the sheep, the most fearful results to health or life may ensue to those who eat the flesh of animals contaminated by the disease. And in view of both the loss of property, and the loss of human health and life, which an epidemic disease affecting our domestic animals may produce, it becomes the obvious duty of the State at once to adopt measures for its extinction.

These remarks have been suggested by the fact that a fearful epizootic is now destroying the cattle in certain portions of the State of Massachusetts, and has already extended to some of the adjoining States. Not long after its first appearance, and about three months since (it having originated from some imported stock), the Massachusetts Legislature appointed a "Board of Commissioners" to provide for its extirpation; that Legislature has recently been again convened, expressly "to consider what further action in this emergency is required."

The importance of this subject to the community at large, in a pecuniary point of view, may be inferred from a few facts in the history of other similar epidemics. During that which affected the neat stock in England from 1744 to 1754-5, not less than 40,000 head of cattle perished in Nottinghamshire alone, and 30,000 in Cheshire, in six months. Parliament enacted a special ordinance authorizing the killing of all infected animals, and during the third year of the epizootic £135,000 was paid by Government for 80,000 head of cattle killed in accordance with that act. During that year also about twice as many died of the disease; making a total loss of 240,000 head. During an epizootic in Holland, in 1857, over 40,000 head of cattle were slaughtered, or died, in only 43 villages. Appalling facts are these to the farmers of New England in the present emergency!

But the danger is by no means confined to New England. A single infected animal transferred to a distant State may spread the disease in all directions, and to any distance. Every cattle-raising State is therefore interested in this subject; and Ohio, Kentucky, Illinois, and, coming eastward, Pennsylvania, New York, and New Jersey, as well as all the New England States, have sent commissioners to Massachusetts to investigate the disease.

Of course everything depends on the competency of the commissioners. And while anybody can kill an infected animal, and so far prevent the spread of the disease, only a thoroughly educated pathologist, whether he be a medical or a veterinary practitioner, is competent to determine the causes of the disease, the laws of its propagation, and the best method of cure. It has been called a pleuro-pneumonia; but the local inflammation is, in all probability, not the essential element of the disease. All epidemic and epizootic diseases are probably due to some agency acting primarily upon the blood.

E. R. P.

[We think that the Legislature of Massachusetts has committed a great error in omitting to appoint a reliable pathologist and physician in their State Commission for investigating this terrible epizootic. The Governors and State Agricultural Societies of Ohio, Kentucky, Pennsylvania, and New Jersey, having commissioned competent medical men to visit and inspect the diseased herds in Massachusetts, have already received satisfactory reports and recommendations from the gentlemen employed on that service. They all agree in the opinion that the disease is contingently contagious or communicable, and hence, that to prevent its extension, all the sick and contaminated animals should be subjected to a strict quarantine. Our readers will bear in mind that this malady is not the ordinary and idiopathic pleuro-pneumonia, but a "*nova pestis*"—so far as the Western continent is concerned—and having pathological and etiological characteristics peculiar to itself. Having examined its morbid anatomy and general pathological history with some care, we shall endeavor to describe

the leading peculiarities of this malady in a future number. We invite further contributions relating to this important disease among cattle, and shall be particularly obliged to correspondents for any facts illustrating the effects of the flesh of diseased animals used for food. As has been remarked by Mr. Gamgee, in his letters on this subject, "The first consideration is to acquire a thorough knowledge of cattle diseases as affecting the health of man, and on the basis of correctly ascertained data, to provide such laws as shall ensure safety under all circumstances."—Ed.]

Medical News.

ARMY MEDICAL INTELLIGENCE.

A MEDICAL BOARD, to consist of Surgeon-General Lawson, Surgeon C. A. Finley, and Surgeon Charles McDougall, will convene at West Point on the 27th of August for the physical examination of the candidates for cadetships. Assistant-Surgeon John F. Hammond has been detailed as Recorder of the Board. For the benefit of his health, leave of absence for one month has been granted to Assistant-Surgeon R. V. Abbot, with permission to apply for an extension of four additional months. Assistant-Surgeon C. G. Hollenbush is staying for a few days in this city.

In the notice of the bust of the late Dr. Isaacs, in our been T. Coffee, instead of T. Cooper.

VERMONT MEDICAL SOCIETY.—This society held its semi-annual meeting at St. Johnsbury, on the 26th and 27th of June, 1860; the president, Dr. E. A. Knight, in the chair. The following gentlemen were elected members of the society:—Drs. G. B. Bullard, S. Newell, James Lang, T. T. Cushman, G. M. Buffum, W. A. Weeks, and Charles S. Cahoon.

THE COLUMBUS REVIEW OF MEDICINE AND SURGERY is the title of a new bi-monthly medical periodical, of one hundred and eight pages, edited by W. L. McMillen, M.D., and published at Columbus, Ohio. Its contents are divided into four parts, as follows:—1. Reviews. 2. Essays and correspondence. 3. Foreign selections. 4. Bi-monthly abstract. Both its literary and typographical execution reflect great credit upon its management.

FISKE FUND.—The Trustees of the Fiske Fund announce that two premiums of \$100 each have been awarded—one to a dissertation on Diphtheria, by Dr. Daniel D. Slade, of Boston, Mass., and one to a dissertation on Uræmia and its Morbid Effects, by Dr. William W. Moreland, of Boston. The following subjects are announced for 1861:—

1. Aneurism: its varieties and their appropriate treatment. 2. Ozone: its relations to health and disease. For the best dissertation on either subject, the Trustees offer a premium of one hundred dollars. Dissertations should be sent, free of expense, to Dr. S. A. Arnold, Secretary of the Fiske Fund Trustees, Providence, R. I., on or before May 1, 1861. Each should be marked by some motto, and accompanied by a sealed packet containing the same motto on the outside, and the writer's name and residence within. Packets accompanying unsuccessful dissertations will be destroyed unopened. The award will be announced at the Annual Meeting of the Rhode Island Medical Society, to be held in June, 1861.

THE NEW SYDENHAM SOCIETY now numbers 2828 members. It has been determined to issue the magnificent Atlas of Skin Diseases, by Hebra. It is a great object to secure a standing subscription list of over 3000 members, and the productions of the Society will increase in an accelerated ratio with the increase of its funds.

THE *New York Courier des Etats Unis*, has the following certificate of a physician:—"I, the undersigned, hereby certify, that Mrs. — died of an unknown disease, of

which I had cured her, but owing to her great age, she was not able to bear up against the stage of convalescence, and died in consequence."

EPIDEMIOLOGICAL RECORD.

YELLOW FEVER is now prevailing to a moderate extent in a large number of the island ports and maritime cities—from Rio Janeiro to Havana and St. Thomas—thirty places having been declared infected. As usual, at this season of the year, the city of Vera Cruz is suffering badly from the vomito; yet we are informed that the malady is so strictly endemic in its prevalence that it does not extend even to the shipping in the harbor; and that in no instance has it appeared to be communicated from person to person. Thus, year by year, is corroborated the strongly-assured remark by Humboldt, that "it is incontestable that the vomito is not contagious at Vera Cruz."

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 4th day of August to the 11th day of August, 1860.

Deaths.—Men, 137; women, 95; boys, 233; girls, 310—total, 654. Adults, 293; youths, 18; children, 419; males, 349; females, 305; colored, 8. Infants under two years of age, 338. Among the causes of death we notice:—cholera-infantum, 132; congestion of brain, 21; infantile convulsions, 40; diarrhoea, 19; dysentery, 13; scarlet fever, 30; typhus and typhoid fevers, 6; inflammation of brain, 17; of lungs, 23; of stomach, 9; measles, 7; small-pox, 8; sun-stroke, 6; consumption, 30; dropsy of head, 30; infantile marasmus, 29. Classification: brain and nervous system, 144; respiratory, 136; digestive, 241.

The number of deaths compared with the corresponding weeks of 1856 and 1859, and of last week, was as follows:—

Week ending August 14, 1860..... 695 Decrease..... 41
" " August 18, 1859..... 661 " " 7

Deaths from acute disease..... 306
" chronic disease..... 151
" external causes, etc..... 43—497

Week ending August 11, 1860—
Deaths from acute disease..... 309
" chronic disease..... 208
" external causes, etc..... 47—654

Increase this week..... 157
Total interments in Potter's Fields..... 65
Coroner's cases..... 46

JULY, and Aug.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General di- rection of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10.	In.
5th.	29.87	.05	80	71	86	9	15	SW.	1.5	.60
6th.	29.95	.04	79	71	84	10	15	N.E.	.01	
7th.	29.88	.10	84	75	90	8	13	SW.	.01	
8th.	29.80	.08	86	76	94	7	10.5	SW.	6	
9th.	29.77	.06	84	77	89	7	10	SW.	5	.08
10th.	29.82	.05	79	73	84	7	10	S.E.	7	
11th.	29.85	.11	73	70	75	6	8.5	N.E.	10	.02

REMARKS ON THE WEATHER.—5th. Thunder-storm with vivid lightning early morn; this day and night, together with the succeeding five, were uninterruptedly hot and damp, with calms or very light winds, making it the sultriest week of the year—the highest dew-point was 77 degrees on the 8th. The temperature fell on the 11th, with a fine light air, A.M., and a fresh breeze, P.M.

MEDICAL DIARY OF THE WEEK.

Monday, Aug. 20.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Taylor, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Aug. 21.	{ BELLEVUE, Medicine, Dr. Elliot, half-past 1 P.M. CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
Wednesday, Aug. 22.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Griscom, half-past 1 P.M. BELLEVUE, Surgery, Dr. Meir, half-past 1 P.M. ACADEMY OF MEDICINE, 8 P.M.
Thursday, Aug. 23.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Greene, 12 M.
Friday, Aug. 24.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Aug. 25.	{ BELLEVUE, Surgery, Dr. Mott, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Griscom, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

Original Lectures.

CLINICAL LECTURES ON AMPUTATION.

DELIVERED AT THE NEW YORK HOSPITAL

BY

JOHN WATSON, M.D.,

ATTENDING SURGEON.

LECTURE II.

GENTLEMEN:—In our last discourse on the subject of amputations in general, I gave you the various steps for performing the operation. I described to you what was called the circular, and also the conical method, giving you to understand that the latter was my favorite operation, and one which I always performed. I wish to qualify this latter statement by saying, that I never resort to it in amputations through the joints, inasmuch as in those cases it is always necessary to have flaps. In the case of that poor girl in Ward 5, whose arm was amputated at the shoulder joint, you will recollect that I made an outer and inner flap. The same thing is done at the knee joint. We must, as a matter of necessity, have a covering either from the anterior or posterior portion. So again, in the amputations at the ankle joint, in what is called Syme's method, an operation which is performed very frequently in this hospital, we always make two flaps, one anterior and the other posterior; and we find that the cases do remarkably well. The same rule holds good in Chopart's operation, where we make a section between the tarsus and metatarsus. With regard to amputation at the hip-joint, though I have never performed it, I am well satisfied that it cannot be done by the conical method. So, Gentlemen, as a general rule, make use of the flap operation in cutting through joints; but, in the continuity of the limbs, resort to the conical method.

It will not suit my present purpose to go into the minute details of the various operations, and describe all the different steps to be taken, I only wish to give you a few hints in relation to them as the result of my personal experience.

I shall call your attention to some points in connexion with the ordinary operations in continuity, which I ran over a hurried at our last lecture. In the first place you have observed, when I amputate at the leg, that I never carry the saw directly through the bone. If this were done the sharp anterior angle of the shin would come in contact with that portion of the flap covering it, and in consequence of the abruptness of the pressure at that point ulceration would be established. To obviate the occurrence of such a state of things, Dr. Kearney Rodgers advised that the angle of bone referred to, should be sawn off obliquely. This practice I have invariably followed out, and I believe it is also looked upon with favor by my colleagues, who as far as I know, always carry out the principle. I would here remark that this is a practice which is not resorted to as a general rule, outside. When I operated a few days ago by taking off a leg, and after I had sawn off the angle of bone, a surgeon from Boston, who was present, remarked to me that he had never seen such a thing done before.

I shall say a few words in reference to the kind of sponges that are to be used in cleaning a stump. A surgeon is compelled, when searching after the bleeding points of vessels, to apply the sponge constantly for a considerable length of time to the raw surface. Now a sponge is sometimes a very harsh instrument, and a new one is particularly so, because its meshes are very commonly filled with sand. How so much sand gets into them I am at a loss to determine, unless it may be due to the fact that the article is sold by weight. If this conjecture is a true one, the practice is a decidedly iniquitous one, because every time the sponge is applied the sand is apt to get into the cut, and it is a matter of utter impossibility, under those circumstances,

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to have union of the wound by first intention. Hence to avoid any trouble from this quarter you had better never use a fresh sponge, always prefer one which has been tried before. It may seem a small matter to you, but rest assured it is one of very great moment to your patient so far as the chances of a speedy cure are concerned. You have possibly not unfrequently seen surgeons rubbing the surface of a stump with these sponges before they get ready to apply the ligatures. This is a very bad practice, and one which no surgeon should accustom himself to. If you wish to wash off the blood and clear away any clots, simply press the moist sponge against the surface, and you will find it answer every purpose; it is not necessary that you scrub the muscles, unless you wish to court secondary union by lacerating to a greater or less extent everything you touch. This is a practice which I don't remember has ever been dwelt upon; still that is no reason why you should forget it. Everything that tends to bring about union by first intention you should be particular to bear in mind.

Next comes another point which is worthy of your serious consideration—the application of ligatures to veins. Surgeons are very frequently obliged to resort to it, but remember, Gentlemen, that as a rule it is not advisable. There is always an objection against leaving any vein open when its mouth is imbedded in a pool of matter, and where the poisonous fluid is apt to wash over it, for the reason that the inner coat of the vessel is very apt to partake in the suppurative action, and lead to disastrous results. In these cases then you are justified in applying a ligature, but if the parts in the neighborhood, are healthy you do well to hesitate. Generally all that is required to arrest the flow of blood from such vessels, allowing that they are not of large size, is to make use of moderate pressure for a few moments at the bleeding point at the same time you remove obstruction from above. There is another circumstance which you do well to take into account in this connexion, and that is, when the tissues surrounding the vein are so much consolidated as to prevent its closure you are by no means, if the vein be large, to trust to anything but the ligature.

There is another point in reference to amputations that is very much neglected, not only in amputations but in most other operations, and that relates to the too free use of anesthetics. I am sorry to confess that the practice is common in this institution to an extent which I am satisfied is productive of no good, and doubtless of a great deal of harm. We use here ether almost altogether, and most of you know that we use it liberally, in fact, we are so much in the habit of administering it that most of us do not stop to inquire as to its bad effects. We never have had a case of death from ether, yet that is no argument to prove its harmlessness. I am satisfied that the administration of the article is too long continued, merely for the purpose of talking about the case during or immediately before the operation. I have heard a gentleman lecture full three quarters of an hour upon the mode of performing an operation, while his victim was lying on the table before him breathing all that time the fumes of ether. I think such a procedure is really cruel, notwithstanding it may not be intentional. My rule is, the instant I get a patient under the influence of ether, to stop talking at once, and go to work with my knife, and, when the operation is finished, give the patient the earliest possible chance of recovering himself. A question has been raised by some, whether wounds would not do better if ether or chloroform were not used in the operation; but inasmuch as it is a matter that is not yet entirely settled, I shall not occupy your time by any discussion of it. At all events, I am certain that those who have taken the anæsthetic for a great length of time, when they are compared with those who have not, all other things being equal, suffer far more from general constitutional disturbances for the three or four days succeeding the operation, than do those of the other class. So much, then, for these little points having reference to the after-treatment of amputations. I believe I have touched on almost every-

thing that is of any consequence in a practical point of view.

Now let me ask your attention to another branch of the subject connected with amputations, to which, in regard to its importance, the mere operation itself is a secondary matter. I refer to the formation of a proper decision in any given case, whether it is best that a limb come off, or not. It is unnecessary for me here to state, that to settle this point, in very many cases, to the satisfaction of your own consciences, requires a great deal of very careful deliberation. In this respect this institution has a great advantage over many others of the same character, and that consists in the fact, that no capital operation is considered properly performed unless a consultation is held upon the case beforehand; and this is one of the reasons why we meet, in the treatment of our cases, with so much better results than surgeons in some other institutions. In the hospitals of some countries, and particularly those among the French, each surgeon is master of his own ward, and, as such, acts in every case under his care as he sees proper. The consequence of all this is, that a great many operations are performed on the spur of the moment, sometimes on the ground of an imagined benefit to the patient, sometimes for experiment, and sometimes—I blush to say it, not very unfrequently for display; when, if due deliberation was exercised, and if the surgeon was careful to consult with his colleagues in reference to the propriety of any such proposed measure, the patient might be saved a great deal of unnecessary suffering, and surgery might claim for itself more triumphs. The point we are to consider here has reference to the practicability of performing the operation in any given case, and the probability of the issue, be it successful or unsuccessful. It is impossible to mark out any definite rule for action in these cases, inasmuch as a great many varied circumstances have to be taken into account, which, to be properly appreciated, must be studied more thoroughly than we have an opportunity for doing at present.

In reference, however, to the time of performing the operation, something may be said in a general way. If you see a man who is able to bear a *primary* operation—that is, where the reaction is sufficiently established to allow the limb to be taken off within twenty-four hours, and where you are satisfied that unless you resort to such an expedient his life will be sacrificed, then you must act at once. But here, again, you are not to jump at a rash conclusion; for you must all the time bear in mind, that by waiting until the suppurative process has been established, all other things considered, you have a better chance for curing your patient. This latter operation, performed at the time referred to, in contradistinction to the former one, is termed *secondary*; and the reason why it offers the best chance for a good result is due to the fact, that the human system, after having sustained a shock in the first instance, gets so accustomed in a short time to a certain amount of disturbance, that it is enabled to bear up under a second shock better than the first one. I will illustrate that fact by referring to the following instance: A friend of mine, a physician of this city, has been for some time past subject to periodic attacks of pneumonia, but his system has become so accustomed to such seizures, that after the first day or two he is, to all intents and purposes, as well as ever, and works through it as an ordinary cold. This gentleman, about the 1st of June, called at my house, and at that time expressed himself as feeling rather unwell. He soon went home, and the following morning I called at his office to see if he felt any better, when I found him with rusty expectoration—in fact, he had pneumonia. He then declared to me his intention of going to New Haven to attend the meeting of the American Medical Association. I could not help smiling at the idea, for I thought that, in his condition, such a thing would be utterly impossible. In the course of a day or two, however, he was about, and, to my utter surprise, I heard that he was at New Haven before the adjournment

of the Association, only the sixth day after the first symptom of his trouble, and in a very comfortable state. Now, contrast this case with one of pneumonia as it is ordinarily met with, where the patient is confined to his bed for two or three weeks, and you will get a good idea of what the system can bear when it has become accustomed to a series of shocks. Precisely the same thing happens after an injury. If you take off a limb by the primary amputation, the chances are that the patient may die of the shock; while, on the other hand, if you wait, and watch carefully the case for a fortnight or three weeks, you will take the shock from him, instead of weighing him down by adding another. You saw that illustrated in the girl upon whom we performed amputation at the shoulder-joint. If we had performed the operation immediately after the accident, we would doubtless have caused her death; but we waited for a secondary operation, and you have marked her improvement since. In two or three days she was better than she had been for two weeks before; and in seven or eight days she felt so well that she asked to sit up. Secondary amputation, then, as a general rule, is always the best, and, consequently, the one which should be the most frequently performed. Those cases which imperatively demand a primary amputation are always attended with more or less risk to the patient. In battle-fields, where men, after they have been wounded, carried hurriedly about from place to place, and suffer all sorts of irritations in consequence, primary amputations are justifiable, when they would not be in civil practice.

There is another class of cases in which you may perform the operation, before the process of suppuration has completed itself, and after the patient it has passed the period for a primary operation. One of these cases you saw illustrated in that man, who had suffered from a compound fracture of the leg, and afterwards gangrene, the result of a bandage which had been too tightly applied, before his admission, in order to restrain hemorrhage. If I had not taken that limb off within twenty-four hours of the appearance of mortification, the man would, in all probability, have died from the shock very much sooner. At one time I had hopes of saving him, but they proved futile. This operation was neither a primary nor a secondary one, but a sort of go-between, the prompt performance of which was rendered necessary by the occurrence of a complication. Cases of this class are met with not very unfrequently; and it would be well for us to look into them a little at this time, that we may briefly refer to some of the circumstances which are to be taken into account in an individual case. A man is brought into the hospital with his leg very badly crushed, still you are not satisfied that it is beyond the hope of recovery until a day or two after, when you discover that the posterior tibial artery has ceased to pulsate. You make up your mind that gangrene will follow, and you feel called upon to operate at once. You anticipate the trouble in that instance. Or if, on the other hand, mortification has already showed itself, you are justified in performing the operation even before the line of demarcation has formed. Again, there are cases where the limb will suddenly swell up after an accident, and turn black, a circumstance which may occur the second day, or perhaps not until two or three weeks have elapsed. The case may have been a very ordinary one at first, and up to this time demanded but a small share of your attention. The occurrence of this complication is owing to the fact, that a spicula of bone has caused, by pressure against an artery, an erosion of its coats, and the formation of a false aneurism. You have then no alternative left but amputation, and that, too, immediately. I have several times been compelled to resort to this measure. If we could know exactly the source of the hemorrhage, it would be easy to cut down and secure the vessel; but we have found such a procedure to be impracticable. These amputations may be styled operations for the emergency.

The place at which you should operate is very frequently

a matter of considerable moment, and there are several circumstances which determine the answering of that question. In the first place you will operate upon a wealthy man in one way and a laboring man in another. You make the distinction only in reference to circumstances that each will be afterwards subjected to. A poor man is compelled to wear a wooden leg and get about with it as well as he can. He must therefore have a stump to suit; for instance, his leg is to be amputated for injury at the ankle joint, the section is made at the "point of election," a hands breadth below the tuberosity of the tibia, and that leaves him all that is required for the proper support of the wooden leg. If, on the other hand, a man can afford to pay handsomely for keeping an artificial leg in trim, then the same operation can be performed lower down, and a greater amount of leverage be given by saving some of the muscular attachments. When the artificial leg is taken into account, the lower down the operation is performed the better. The "place of election" is sometimes also determined by the nature of the accident. All other things being equal, if the tissues around the seat of the injury are not filled with extravasated blood, or torn to any great extent, you may operate very near to the point of laceration. But there is a certain class of cases where the circumstances are exactly the reverse; I refer to railroad accidents. The shock to the tissues goes much beyond the point which appears to be the limit of the injury. In some instances where the feet or legs are lacerated by railroad accident, the muscles in the upper part of the limb not unfrequently partake of the shock. You should always recollect that in these cases you are to make your cut some distance from the apparent seat of injury—give yourself plenty of room and you will not regret it. In that case of gangrene of the leg which I have already alluded to, and which was the result of a railroad accident, you will recollect that at the time of the operation there was so much sound tissue below the knee that I was almost tempted to take the limb off at the "place of election;" but in order to make sure of a good result, I determined to amputate through the thigh. Notwithstanding this I found, on cutting through, the muscles in the back part of the thigh that they were flaccid and almost dead. You all followed that case up and know of its termination. The stump did well enough, but death supervened in consequence of phlebitis.

Let me call your attention now to another class of cases which is a source of great annoyance to the surgeon, and almost invariably results in the death of his patient. A person becomes very much exhausted by the suppuration following an accident, and you come to the conclusion at a certain time that it is best to remove such a drain upon his system by amputation. The patient thinks differently, and is determined to stout it out in spite of you. You watch the case with a great deal of anxiety from day to day, may be from week to week, until finally the patient is disheartened and gives his consent only at such a time when the last opportunity for the indulgence of the hope of recovery has passed. You saw a case of that sort a few days ago in Ward 4, which terminated eventually in death—I refer to the Portuguese sailor who was admitted with a compound fracture of the thigh. If amputation had been resorted to at the time when suppuration was fully established, his life might have been saved, but he declined to have anything done until such time as hectic fever and coilliquative sweats came on, when I declined to interfere and he was compelled to die with his limb on.

There is, I think, a very important point to be borne in mind in this connexion, and that refers to the fact of soliciting any patient to be operated upon. Never do it. I generally request the House Surgeon to lay the facts of the case before the patient in their true light, and obtain his unqualified consent to the expedient. If I am to operate I make it a rule never to urge the measure, because it is enough for one man to take the responsibilities of the operation without anything else; for you cannot be certain of the result. There is a class of surgeons to be found every-

where who are always looking after a good reason for performing an operation, and justifying such in their own eyes. These are the men who may be justly styled surgical aggressors, always on the look-out for some operation to found a reputation upon. There is, again, another class, who are equally dangerous to their patients, and these are termed the "old fogies," who are always straining to find out the reason why these cases cannot be left to nature that they may be enabled to shrink, in very many instances, the performance of their duty. They are the conservatists. You must steer between these two extremes, and where there is a doubt one way or the other, give your patient the full benefit of it. For my own part, I can conscientiously say, that if I have erred any in my practice, it has been by carrying out the latter principle, which I have always striven to do to the best of my knowledge. Permit me to say here that you never can be certain, at least you have no claim to be so, in any given case, unless you have had years of experience to uphold you. There are just as many uncertainties in surgery as there are in medicine, and both together constitute a problematical art, each case of which has to be solved by itself. There are some other points that I should like to dwell upon, which have reference more particularly to those accidents which are liable to occur after operations, but I shall defer their consideration for the present, hoping to give a special discourse on the subject at some future time.

RATIONAL TREATMENT OF TYPHOID FEVER.—"Having, however, had very many cases of Typhoid Fever under my care at the *Dreadnought* Hospital, and having observed an aggravation of enteric symptoms, such as griping and tympanitis, almost invariably follow any arrest of the diarrhoea in the early stages of the disease, and cerebral complication frequently induced by premature over-stimulation, I was led to reflect upon the subject. I soon came to the conclusion, that the disease in Peyer's glands, and the peculiar cell-growth developed therein, with the concomitant diarrhoea, were but part, and, in the absence of much eruption, the principal part, of the process of elimination set up by Nature. I determined, therefore, to let cases which might come under my care run their course, uninfluenced by any special treatment whatever; to give only such an amount of stimulus as might be necessary to sustain the flagging powers of the system, and to assist Nature solely by attention to modified hygienic arrangements in the way of rest, temperature, and diet. From the cases thus allowed to run a course absolutely uninfluenced by drugs, I was enabled, to get an insight into the natural history of this disease. I found that, during what I knew to be the stage of inflammation and ulceration of Peyer's glands, diarrhoea was the rule, and I quite understood that it was necessary. Towards the period of convalescence, however, when ulcerative action had ceased, and cicatrization had commenced, I found that the opposite condition was the rule. Nature kept the injured parts quiet, by calming peristaltic action; and the bowels, instead of acting several times in the twenty-four hours, were frequently not open more than once in two, three, or four days. In one case there was no evacuation for more than a fortnight; but experience taught us to let matters take their natural course, and the case did perfectly well. It must not be imagined, because special drugging is generally useless or injurious in such cases, that the offices of the medical man are not required. On the contrary, an intelligent reading of Nature, and fulfilment of her indications as to rest, diet, and non-disturbance of intestinal action, up to an advanced period of convalescence, are necessary in order to ensure a successful issue. Moreover, the rational practitioner is not fettered by any stereotyped conclusions, and reserves to himself the exercise of judgment in the administration of drugs when they may seem to be required."—*Dr. Ward's Oration before the Hunterian Society.*

Original Communications.

RADICAL CURE OF HERNIA.

By J. W. Riggs, M.D.

THE readers of the *New York Journal of Medicine* will remember an article which appeared in March, 1858, describing a new operation for the radical cure of hernia, and was accompanied by a wood-cut of the instrument employed, together with a report of all the cases in which the operation had then been performed.

The vastness of the interests involved, and the fact that no operation or device hitherto employed for the cure of hernia has been entirely successful, are deemed sufficient reasons for inviting the profession to a further consideration of the subject, with the hope of an ultimate triumph over this almost universal scourge.

Can this operation be practised with safety? The fear of peritoneal inflammation has, in some instances, doubtless deterred surgeons from testing this operation. It is indeed the chief and only argument urged against this as well as other operations for the cure of hernia.

Since its first introduction in this city, it has been repeated by surgeons here and elsewhere in considerably more than one hundred cases, and so far as I am informed, without evil consequences in any instance. Though this fact alone goes far toward establishing the safety of our method, we are fortunately in possession of statistics regarding other operative procedures, which may be brought to our aid in deciding the question above proposed.

Wutzer's method, which was first introduced more than twenty years since, and has been practised more extensively than any other, is spoken of by its author as follows: "Since the autumn of 1838 I have repeatedly practised my operation in the clinique every session before many witnesses, and I have never seen severe peritonitis follow it, still less any fatal results."

Prof. Rothmund, of Munich, in speaking of Gerdy's operation (the danger, if any, being the same) says, "I have repeated this operation at least a *thousand times* without any bad results."

Now, though the tissues involved by all the foregoing methods are identical, there are in the details of treatment essential differences, which, as bearing upon their relative safety, are worthy of mention. For instance, by the plan we advocate, the parts are simply pierced by the instrument, and the *inguinal canal alone* is subjected to the action of the foreign body then introduced, for a space of time varying ordinarily from one to two days (though sometimes longer) according to the circumstances of the case and the views of different operators. By Wutzer's plan, it will be observed, the same parts are in like manner not only pierced, but the needle or stiletto is kept "in situ" and the tegumentary as well as subjacent tissues, including a large portion of the scrotum, are clamped and rigidly bound in a restrained and very uncomfortable position for several days, which cannot fail to aggravate the suffering of the patient—and if it do not also increase to some extent the danger of peritonitis, it certainly cannot diminish it.

So also of Gerdy's operation it may be said, in short, that the means employed for retaining the plug in the passage must be attended with greater risk of peritonitis than the operation under consideration. Hence it is assumed that if operations like these can be repeated thousands of times "without any bad results" as from the evidence before us they must have been, then the method we propose may be as many times repeated and with less apprehension of dangerous consequences.

It may be added, moreover, in the language of (we think, the *Virginia Medical Journal* (Prof. McCaw): "If we do not fear to throw the iodine solution into the pleura or pericardium—into ovarian cysts or even into the peritoneal

cavity—why should there be any hesitation in using the remedy for the radical cure of hernia?" And, even admitting (what from the testimony is readily admissible) that "severe peritonitis" may occasionally result from the operation, it by no means follows that *traumatic peritonitis* is at this day necessarily and always fatal to the patient. The operation, then, must be regarded as free from danger, and no surgeon who may deem it worthy of further trial need be deterred from its repetition through fear of evil consequences.

In almost every instance where the results of this operation have been communicated to us by the operating surgeon, they were thus reported very soon after treatment, and as being satisfactory. It must, however, be admitted that, in the absence of all knowledge of their subsequent history, it is impossible to arrive at any satisfactory conclusions as to the measure of success attained—though, as in very many instances of apparent cures by other methods, relapses have sooner or later occurred, so also, by this plan of treatment have our hopes been disappointed too frequently by a return of the hernia when a better result was confidently and perhaps not unreasonably expected.

Though thus left still in doubt as to the efficacy of our plan, and unable to decide upon its merits as a means of cure, yet the experience of the last two years has by no means failed of its benefits. For example, the feasibility of the operation is believed to be established; and we have learned, moreover, that to render it entirely successful there are obstacles yet to overcome.

The profession are aware, that the "American Medical Association," several years since, chose a committee consisting of Drs. Hayward, Warren, and Parkman, of Boston, to investigate the various methods by which the cure of hernia had been attempted, and to report the results of their inquiries at the next meeting of that body. It will be remembered that in my article of March, 1858, allusion was made to this report, and the conclusions reached by the committee were briefly given in substantially the following language—"That either there were some inherent difficulties in the way of the radical cure of hernia, or the proper method had not yet been discovered."

In my remarks upon the probable causes of failure by the various methods which had passed under review by the distinguished gentlemen of this committee, it was suggested that one of these "inherent difficulties" was that, owing to the low vascularity and consequent low vitality of the lining tissues of the hernial passage, the *milder and safer* of the means employed for the purpose had proved inadequate to the production of the necessary inflammation, whereby to secure firm and reliable adhesions, and consequent occlusion of the openings.

That this has been the chief cause of failure by my method, in a number of instances under my own observation, may be inferred from the fact that in those cases where sufficient inflammatory action was produced to secure a plentiful effusion of lymph, and where, also, the necessary precautions as to support *after the operation* had been observed, the results, *thus far*, have been entirely satisfactory.

Too much and long continued pressure by the *convex truss-pad* was also suggested as an obstacle to success. Having in my own practice guarded against this supposed evil, I have seen no case since the time mentioned in which injury could have resulted from this cause. The effects of *undue pressure* however, particularly upon recent formations, and *still more upon forming tissues*, are too well understood by the profession not to see the evils so certain to result from the unskillful or injudicious application of pressure in these cases.

Notwithstanding these precautions as to pressure by the *convex truss pad*, it is nevertheless important, if not indispensable to success, that the parts are *properly supported*.

Wutzer, after speaking of his operations, as before quoted, proceeds to state that, "all those operated upon have not been cured. In several, relapses have followed, but this was

traceable either to the patients leaving off the truss or undertaking hard bodily labor *too soon after the operation.*"

As to the necessity of support, we have also the concurrent testimony of other surgeons, whose opportunities for observation have been ample, and whose opinions are entitled to our utmost confidence and respect, so that instead of leaving the parts unsupported after the lapse of some two or three weeks, and even less, as has generally been practised, our chances of success would be greatly enhanced by a much longer continuance of a suitable truss or other means of support to the parts.

In every instance, without exception, that I am aware of, where my operation has been performed, the result seemed, at first, to be entirely satisfactory—that is to say—the viscera were retained without artificial support for a space of time varying from several days, in some instances, to weeks and months in others. And so far as I am informed, the same thing has been observed with regard to Wutzer's as well as other operations for the radical cure of hernia.

With the great preponderance of testimony to the contrary, I cannot of course assume to demonstrate that hernia is curable in a majority of cases either by my operation or perhaps by any other process. I do, however, confess my great reluctance to abandoning the affirmative of this question, at least until all the known means which *promise success* shall have been proved abortive, or, so long as the animal tissues concerned in hernia are identical and subject to the same laws with all other parts of the body.

In order to render more clear and intelligible my views with regard to the justly styled "inherent difficulties" to be encountered in the radical treatment of hernia, the reader is referred to the following wood-cut illustrations, designed to represent the inguinal canal in its normal state, and also as found in cases of rupture.

Plate 1.

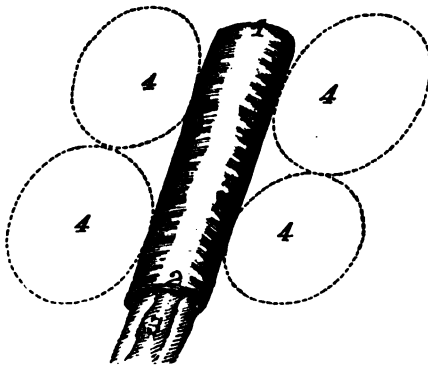


PLATE 1.—Fig. 1. The internal ring. Fig. 2. External ring. Fig. 3. Spermatic cord. Fig. 4. Knobs of the multipedal truss-pad, exerting lateral pressure, and keeping the canal free of the viscera.

The average length of the inguinal canal in the adult is, as shown in Fig. 1, something over one inch and a half, and its breadth corresponding as nearly as may be with the figure here presented. The dotted lines on either side of the passage are intended to represent what is deemed the only proper method of applying pressure by a truss.

Fig. 2 is supposed to represent something near the average condition or dimensions of the inguinal canal in ordinary cases of oblique inguinal hernia. The canal, it will be noticed, is very much shortened, while its diameter, particularly from its lower third upwards, is very much enlarged, from the constant pressure and wedge-like action of the viscera.

To show that the inguinal canal, for two-thirds its length, more or less, from the internal ring downward, is usually occupied by the intruding viscera, as stated, it is only necessary to refer to the situation in which the truss-

Plate 2.

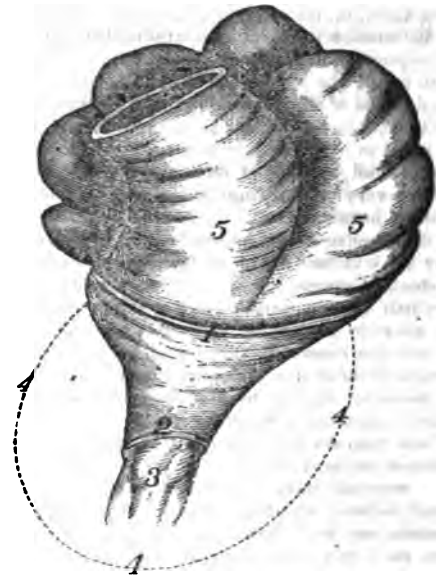


PLATE 2.—Fig. 1. Internal ring forced down by the intestine. Fig. 2. External ring. Fig. 3. Spermatic cord. Fig. 4. The dotted lines showing the bearing of the ordinary convex pad as usually worn. Fig. 5. The intestine.

pad is almost universally worn, and to the form of the ordinary pad itself.

To say nothing of the loss of substance, nor of the deplorable evils from confining the cord between the convex pad and the pubes, and thus intercepting the passage of the blood to the testes, it suffices our present purposes to state the fact, that in at least nine-tenths of all those who now come under our notice, and even at the time wearing trusses, from one-third to one-half, the pad (the most prominent part) was found overlapping the bone and of course serving only to *dam up* the canal at the external ring without offering sufficient resistance above to prevent the bowels from lying in that part of the passage, and thus shortening, and also enlarging it as represented, by dragging down the internal ring.

Assuming, then, what no one will dispute, that the canal is *always enlarged and shortened* where hernia exists, and moreover, that this enlargement increases as we approach the internal ring, it is by no means difficult to conceive how a pocket or funnel-shaped receptacle for the intestine must necessarily be formed, and how also the viscera so naturally fall into and occupy this portion of the canal, reaching down ordinarily to within half an inch, more or less, of the external ring, and until their further descent is opposed by the truss situated as before described.

This over-distended condition of the canal, throughout its upper two-thirds, and even more, is very frequently noticeable also, particularly in persons predisposed to hernia, long before there is any protrusion through the external ring, and of course before the application of the truss. Indeed, there is little doubt but that in a very large majority of ruptures, the passage of the protruding parts through the openings is a gradual process, occupying months and even years for its accomplishment—and in all these cases the enlarged and shortened condition of the original canal, prior to the discovery of the hernia even, is a foregone conclusion.

Now it has been stated that in most, if not in all cases, the operation *seemed for a time* to have been successful. Why? Our explanation of this *partial or apparent success*, so uniformly witnessed, is simply that the passage at and about the external ring is comparatively small, the surfaces desired to be united are already in contact, and by almost

any dressing are easily maintained "in situ," while, moreover, either from the overstretching of the ring during the operation itself, or from some other cause, there is always more inflammation in this immediate locality than above it, and consequently, adhesion at this point may be supposed always to follow the operation—and *in proportion to the extent and firmness of these adhesions, is the treatment successful.*

If Plate 2nd is anything like a true illustration of the original canal in ordinary hernia, a mere glance at the figure will scarcely fail to suggest one of the "difficulties" (and I regard it a very serious one) in the way of our successful treatment of hernia.

The inferior pillar of the internal ring is here seen dragged down by the constant action of the viscera, until the canal itself, instead of measuring an inch and a half, is reduced to less than half that in length—and whether or not this be the fair average in hernia, instances are very common, when, from this cause, the canal is entirely obliterated and the passage through the abdominal walls, instead of being oblique, becomes direct—thus constituting what may be practically considered a direct hernia.

Can these relapses, which occur after apparent cures have been effected, be prevented?

Though we shall make no attempt to demonstrate, as before stated, to *what extent* the cure of hernia by our method is practicable, we must, with due deference, assume that in a certain ratio, yet undetermined, it *is curable* by the plan proposed; and we must, moreover, be allowed the expression of convictions which are irresistible, that, with the necessary precautions, aided also by such facts as have been furnished by past experience; the percentage of radical cures *may*, and we believe *must and will*, be so very largely increased as that the treatment advocated will commend itself to favor with the profession.

What has our experience taught?

If hernia is to be cured by occlusion of the inguinal canal (and we know no other way), the first step toward the attainment of our object is to excite inflammation in that passage. If, again, it is expected to cement the walls of this canal *throughout its length and breadth*, it is a foregone conclusion also that the inflammation thus excited *must necessarily reach to that extent*. Moreover, it must not only be co-extensive with the parts to be united, but it must also be of such grade as to secure the necessary effusion of lymph, by which only the tissues are first agglutinated, then assimilated, and ultimately firmly bound together. Still another self-evident proposition and indispensable prerequisite to success is, that during this engrafting process the surfaces sought to be united must be brought into contact, and this state of coaptation carefully maintained, if possible, until nature shall have completed her work by uniting surface to surface, and part to part, by adhesion.

Though the profession are perfectly familiar with these universal and ever operative laws, yet it is too obvious that in a very large majority of instances where this operation has been practised, many, and not unfrequently the most important, of these have been either overlooked or wholly disregarded. It is well known, too, that the operation has sometimes been performed in cases where not only the obliquity of the canal was entirely lost, but where, in addition to this, the external ring was so distended as that no human agency (short of the ligature) could serve to bring its superior and inferior pillars even into (so to speak) the same locality.

So also, in more cases than one, this operation has been performed—attempted rather—by carrying the instrument up *anteriorly* to the external oblique muscle and introducing the seton (?) between it and the integuments; an error, very easily fallen into, where the finger of the operator is not first placed as a guide under the tendon of this muscle.

But to the indications. It may be argued that it is easier oftentimes to point out indications and make suggestions than it is to fulfil or comply with them, and this, we apprehend may, to some extent, be found true in the case before us; but if we can ascertain the precise nature of the "in-

herent difficulties" which have thus far so effectually baffled our attempt for the radical cure of hernia, we shall then know at least in what direction to look for means by which to surmount the obstacles so long in our way, and assuming that some, if not all, the principal impediments to success have been adverted to, we come now to consider,—*How shall they be avoided?* The means by which, with the greatest certainty, as well as safety to the patient, the necessary inflammation may be produced, seems yet to be matter of speculation. Tinc. iodine has been used in a large proportion, and perhaps a majority of the operations, but in no instance under our observation, has its effects been entirely satisfactory. In three several cases, this article was used *liberally* at the time of the operation, and again *liberally also*: in one instance in thirty-six hours, and in the other two cases forty-eight hours after the operation; and in each case the effect of the second application *seemed to be to allay rather than increase the inflammatory action.*

Tinc. canth. has been employed also to considerable extent, and with similar results. Naked threads, from one to a dozen in number, of saddler's silk, linen, cotton, and wool, have been drawn into the canal and then left for a time varying from two to ten or more days—averaging perhaps three days. The effects in these cases, and particularly when suppuration was fully established before the removal of the (so-called) *seton* (?) have not been what was desired.

In one instance, an intelligent surgeon, Dr. Crofte, states that he drew into the canal a drop or two of croton oil, and "there was by no means too much inflammation." In another case under my own care, one-fourth gr. solution of ant. tart. was introduced and remained in the canal twenty-four hours only. In several instances (some eight or nine) I have employed a naked cord of such size as could be easily introduced, made of hard-twisted and coarse linen twine, which has remained from thirty-six to seventy-two hours in the passage, averaging, however, not more than forty-eight hours, and in all these the results, thus far, have been far better (with the single exception of that in which the ant. tart. was used) than when the foreign body has been medicated. In three of the last mentioned cases the cord was drawn rapidly back and forth in the canal, both before and at the time of its removal. In two of these, it was see-sawed in thirty-six hours, and the same thing repeated, and the cord removed in forty-eight hours after the operation. In the third and last case, this process was resorted to in twenty-four hours, and repeated and removed at the expiration of thirty-six hours after the operation; and it may here be remarked, that with the single exception of that in which the ant. tart. was used, no case has been so entirely satisfactory, thus far, as the one last described.

The late much-lamented Dr. Isaacs of Brooklyn, in an operation some few months since, introduced the persulph. fer. (Squibb's), one part to three parts water—using for the purpose several threads of saddler's silk, all of which, save one thread, were withdrawn some forty-eight hours (as nearly as recollected) afterward, and the remaining strand saturated with the *pure* persulph. and left "in situ" four hours longer, at which time the tumefaction and pain being very much increased this was also removed. In a note from the Dr. some three weeks after the operation, he informed me that it was highly satisfactory, and no higher authority will be sought to warrant future trial of this article—and from its wonderful and well-known effects when injected into varicose veins, it may at no distant day equally challenge our admiration in these and other cases.*

By the *necessary inflammation* is here meant a grade or degree of inflammatory action which, though by no means violent, is yet pervading and persistent in character, and thus so well calculated to cement and consolidate and con-

* I have recently learned from Dr. Crane, of Brooklyn, that a relapse occurred in the above case. The details of treatment after the operation (as communicated by the Dr.) I am unable to furnish, the paper itself not being at hand.

vert, as it were, into one homogeneous and inseparable mass all the tissues subjected to its action. To admit here that the means hitherto employed have failed in these particulars, is only to concede what, unfortunately, is too well demonstrated.

The inflammation caused by the iodine, cantharides and (ordinarily) by the naked threads, has been so evanescent or transitory in its character as scarcely to have *promised* even the accomplishment of its important mission.

Again, it is possible, and even highly probable, that in some cases where these agents were employed, the inflammation excited by them would have been more lasting, and consequently more satisfactory, had it not been arrested and (essentially) cured by the supervention of suppuration, caused by the continued pressure of the irritant.

Support after the Operation.—In the first article published on this subject it will be remembered the *sponge compress* was recommended. The suggestion is here repeated, and no hesitation is felt in urging it upon the reader's attention. If most trusses are essentially convex in their elements, and are almost universally worn as represented in plate 2, with the centre and more prominent part but little, if any, above the external ring (as they must be to retain the viscera except in slight cases), if, moreover, the statement be true, that, as a *general rule*, the viscera occupy months and sometimes years in making their passage through the canal, then we need no further *confirmation* nor *explanation* of the fact, that, in every case of hernia, *without exception*, this widening and shortening of the canal exists in a greater or less degree.

This, we repeat, is believed to be *one* of the "difficulties" (and a serious one too) in the way of our success—for it is obvious that the *sack* or *pocket* formed by the forcing downward and backward of the posterior walls of the canal, as represented in the plate, must be obliterated or partially destroyed in order to prevent the bowel from resuming its accustomed position in the gaping receptacle, and thus tend continually, powerfully, and almost inevitably, to bore its way, sooner or later, entirely through the passage.

Hence our decided preference for the moistened sponge, as a compress during treatment, and based upon these propositions, 1st. The pressure thus exerted being equable and uniform, does not interfere materially with the circulation nor the deposition or effusion of lymph. 2d. It can under all circumstances be at least *tolerated* by the patient. 3rd. From the well-known elasticity of the moistened sponge, its tendency must be to prevent a vacuum (so to speak) in the canal, by pushing back and maintaining the *anterior*, in contact with the *posterior* walls of that passage.

The sponge may be secured, during the time of confinement, to the horizontal posture, by a simple bandage or roller firmly drawn around the pelvis, and anchored down by a turn around the thigh. The compress should be large enough to act upon the entire passage, though with greatest force, opposite the *internal* ring; and should be kept moist by the occasional application of water.

It will be borne in mind that our only reliance for maintaining in contact the walls of the canal and preventing the entrance of the viscera at the internal ring, is upon this compress, and hence, in its application as well as throughout the treatment, too much care cannot be exercised in order to render its action efficient and reliable for the purpose intended.

How long the bandage or some *suitable* truss should be worn, further experience will determine perhaps. With the facts already before us, however, concerning this as well as other methods of treatment, an average of three months can scarcely be considered too long a time to maintain suitable support of the parts. As to the kind of appliance to be employed for this purpose, (as soon as the tenderness shall have sufficiently subsided to render it admissible) we would refer to plate 1st as illustrating our views as to the principles upon which the truss should be constructed. The reasons for this are patent to every reader and need not here be detailed.

Method of Operating. In most instances where I have witnessed this operation, the surgeon has carried up the tissues of the scrotum upon the finger with the palmar surface of the hand upward. This places the left hand of the operator very much in the way of the introduction of the instrument, so much so indeed, as in some cases where the ring is small and rigid, to render this part of the operation exceedingly difficult.

To avoid embarrassment from this cause and to simplify this very simple procedure, it is recommended that the surgeon take his position, sitting or standing, with his *left* side to the patient's *right*, both thus facing the same direction. The palm of the left hand is now laid upon the pubes, the index finger reaching down to such point upon the scrotum as may be selected for the invagination; then, this finger being flexed, seizes the integuments, and carries them upward to the abdominal ring, the hand meanwhile lying flat upon the abdomen, and offering not the slightest impediment to the introduction of the instrument, or any other necessary manipulation by the right hand of the operator.

This position secures other advantages also worthy of mention. Cases are by no means rare where the comparative small size of the abdominal ring, or where, from the continued pressure of the prominent truss pad, its superior pillar is driven backward and apparently downward also; it is with some difficulty that the end of the finger is fixed securely and satisfactorily, as it always should be, beneath the tendon of the external oblique, in order to make sure of the passage of the bulbous extremity of the instrument *into* the canal. Besides, having passed the bulb fairly within the ring, the left hand is now not only liberated, but is found in the best possible position both for "clearing the track" from any intruding portion of viscera and making the counter pressure upon the surface which so much facilitates, and always ensures the ready exit of the stilette through the integument opposite the internal ring.

The want of the necessary data to be enabled to report such reliable, and at the same time interesting facts, as the profession have a right to look for in a medical journal, must excuse us for offering, instead of such report, the following general statement, which embraces all the facts of importance now in our possession, regarding the cases treated by our method.

The number known to have been operated upon, exceeds, as before stated, one hundred cases; of these, eight were reported in the "*New York Journal of Medicine*," for March, 1858—seven being inmates of the State Emigrant Hospital, Ward's Island, and treated by Prof. Carnochan. Of the history of these, since the above date, I have no knowledge. Of the other case, under my own treatment, and embraced in the foregoing report, it may be said—some six months or more after the operation this man died very suddenly, after violent exertion, from supposed disease of the heart. This, it will be remembered, was a case of large scrotal hernia of twenty-six years' standing, and the patient a laboring man aged about sixty-three, and badly crippled by his infirmity for many years. In this case the viscera never protruded through the abdominal ring after the operation. A very light French truss (for want of a better) was worn to the last.

Of some twenty cases in addition to the above which came under my notice, the majority being my own patients, there are *five at least* which there is every reason to believe will prove entirely satisfactory. The first of these dates back to April, 1858. Scrotal hernia of thirteen years standing, the patient a middle-aged gentleman of this city; the operation by Dr. Quackenbosc, and witnessed by Drs. Batchelder Buck, Watson, and others. When last examined, a few weeks since, there had been no protrusion, and the walls were firm and rigid. It should be observed that, there being a *direct* hernia upon the opposite side requiring gentle support—a light double truss (multipedal pads) is still continued in use.

A gentleman some twenty-five years of age—inguinal

hernia upon both sides which had existed from childhood, was operated upon about one year ago in Brooklyn, in presence of several prominent members of the profession of that city.

In this case, when last heard from, a month since, through his brother in this city (the patient being now in the West), he reported one side as cured and entertained doubts as to the opposite side. From the doubts thus expressed, the inference is, that this side is at least materially improved. The multipedal truss is believed to be still in use in this case.

Some fourteen months since, the operation was practised upon a man in this city, about forty years old, with ordinary inguinal hernia of but few years' standing. When seen last (in November) the case in all respects was entirely satisfactory.

_____, of Brooklyn, had the same operation about 1st of March last. Ordinary inguinal hernia of some two years' standing; no case has been more satisfactory than this appeared when last seen, some five weeks since. There are two other instances in which we hope and confidently expect to be able to report successful results.

Of the remainder of the cases noticed by us very little is now known. To admit, however, in the language of Wutzer, that "all those operated upon have not been cured—in some, relapses have sooner or later occurred," would be only to admit the truth.

We might indeed say more—that there have been many failures to cure hernia by the plan we advocated. Until, however, this method be more fairly and more thoroughly tested by bringing to our aid the results of past experience, as also those of future inquiry and investigation, we are by no means prepared to admit that the radical cure of hernia is beyond the reach of art, nor, moreover, that it may not be accomplished in the manner here proposed.

ASTOR HOUSE (in Barclay Street), N. Y.

Reports of Hospitals.

ST. VINCENT'S HOSPITAL.

FOUR CASES OF CEREBRO-SPINAL MENINGITIS—SUCCESSFUL OPERATION FOR VESICO-VAGINAL FISTULA.

[Reported by Wm. O'MEAGHER, M.D., Resident Physician and Surgeon.]

CEREBRO-SPINAL MENINGITIS.

CASE I.—Mary D—, twenty-three years old, single, domestic, was admitted April 16th, 1860, during the service of Dr. Burtzell, and subsequently of Dr. O'Rorke. She presented the appearance of a stout, well-developed woman, and, from her own account, had previously enjoyed good health. On the night before admission, for some reason not stated, she slept upon a mattress on the floor, in a strong current of air. Next morning she awoke with a feeling of soreness and pain all over the body, especially in the back of the head and neck, extending along the spine. The slightest movement, either forced or voluntary, produced extreme pain. The head being drawn back was immovable, as if from the effect of tetanic spasm; the pain was most intense in the cervical vertebrae and surrounding parts; eyes staring, wild, and fixed; conjunctivæ congested; pupils sluggish, that of left eye dilated; photophobia little or none; frequent lachrymation; face flushed, with an impression of intense suffering; tongue coated, whitish-brown, red at tip and edges, swelled, protruded slowly and with a tremulous motion; speech slow, moaning, and sometimes unintelligible; deglutition of fluids not impeded; respiration hurried and sighing; action of heart increased; no pulmonary symptoms; teeth set and some-

times ground together. The pulse was quick and irritable; a clammy fetid sweat pervaded the body; abdomen slightly tympanitic; bowels costive; and there was some oedema of the extremities. At first only external anodynes and some cathartic medicine was prescribed, together with fluid nourishment and some stimulants. The next day the symptoms became aggravated; and there being no movement from the bowels the cathartic dose was repeated; other treatment continued, and in addition fifteen drops of Magendie's solution at night. There was a very slight improvement in the general condition of the patient for the two following days. The enemata failed in producing any effect, notwithstanding they were administered repeatedly, and it was not until a full dose of castor-oil was given that the bowels acted. The pain in the post-cervical region continuing, dry cups were applied to the part and afterwards a blister. On the 21st (May) iod. pot. was prescribed, but seeing no good effect from its use calomel and opium was administered, at the same time the blistered surface was dressed with ung. hydrag. mitior. This plan of treatment was continued for a week with no good effect when the internal use of calomel was substituted by iod. potassium, the mercurial ointment, however, was kept applied to the back of the neck for a couple of weeks longer. About this time, (June) a slight paralysis of the left side began to show itself. The disposition which existed to the occurrence of constipation could only be effectually overcome by the use of castor-oil. On the 9th of June bed sores appeared over the sacrum. At this stage of the disease the patient began to sink, stimulants were given freely, a blister was reapplied to back of the neck, a one-eighth grain of calomel was placed upon the tongue every fifteen minutes, turpentine enemata were constantly administered, but all to no purpose. Death took place on the 5th of July. No autopsy could be obtained.

CASE II. occurred in the surgical division. Ellen D—, aged 20, single, domestic, of strumous diathesis, was admitted Aug. 23d, 1859, during the service of Dr. A. B. Mott. She had rheumatism during the previous winter, from which she thought she had entirely recovered. About three weeks previous to admission she noticed, for the first time, a weakness of the back and a prominence of the spine in the lower dorsal region, together with considerable swelling in the left iliac fossa. As far as she knew she had never received a hurt likely to cause this lesion. At the time of her admission into the institution she was suffering from headache, anorexia, and insomnia. There was also suffusion of the eyes and face; pupils sluggish though not dilated; tongue brown and somewhat dry; pulse small and accelerated, and bowels costive. Her condition was not such as to cause alarm, and she was simply ordered to remain in bed, to have plenty of fluid nourishment, counter-irritation to the spine, and to swelling in the iliac fossa, which was looked upon as the commencement of lumbar abscess. In a few days her condition was so much improved that she ventured to get out of bed, but while walking around the ward she tripped and fell heavily to the floor, her back coming in contact with a chair which happened to be in the way. From this time she grew rapidly worse; typhoid symptoms set in, and for several days she continued delirious, with only short lucid intervals; tetanoid convulsions were soon superadded, and she died comatose on the 15th of September.

CASE III.—Timothy R—, aged 30, married, by occupation a carpenter, was admitted to the surgical division June 26th, 1860, during the service of Dr. Thebaud. This patient was of low size, swarthy complexion, melancholic temperament, while testing his strength by means of one of those machines frequently seen in the streets, and on making a sudden effort, he experienced a sensation of sharp pain, as if something had been torn violently in the lower portion of the spine. For several days after this, the pain continued, extending downward to the legs, and finally concentrating itself in the left extremity. After the lapse of about five weeks, it grew somewhat better, so much so

that he resumed his employment, but he was unable to continue it for any length of time, the pain returning with even more violence, and rendering him almost a helpless paralytic. He also noticed that his symptoms were aggravated at the approach of rain, or any sudden change of temperature, and relieved again when pleasant weather appeared, by a return to the former condition. On admission to hospital, this pain was altogether confined to the left leg, between the knee and ankle. This he described as perfectly agonizing, especially when he attempted to walk or work. He also complained of nervous twitching throughout the whole extremity. On examination, some tenderness was perceptible all along the spine, especially at the sacro-vertebral articulation. Other symptoms observed were weakness of intellect, indicated by garrulity, loss of memory, puerility, and religious monomania. The pupils sluggish and dilated, the eyes dull and staring. He walked lame, had lateral curvature, and carried the left shoulder higher than the right. His general health also suffered; was emaciated; had no appetite; bowels costive, and sleep disturbed with frightful dreams. The treatment consisted of a blister to the lower part of the spine, and gr. i of ext. nuc. vom. three times a day, together with laxatives and plenty of fluid nourishment. This was continued for a few days without producing any sensible effect on the complaint, when decided symptoms of insanity made their appearance, and he was discharged as an improper object for treatment in the institution.

CASE IV., similar to the above, was in the ward at the same time. This was a young married man, a laborer by occupation, who received an injury to the lumbar vertebrae, by attempting, with others, to raise a huge block of stone, by means of a crow-bar used as a lever. This accident resulted in caries with some, though not very decided, symptoms of spinal meningitis. He also had tubercles in his lungs, and was of a strumous habit. By means of counter-irritation to the affected part, supporting treatment with cod-liver oil, and the prone position in bed, he improved in a short time sufficiently well to be able to go to the country.

SUCCESSFUL OPERATION FOR VESICO-VAGINAL FISTULA.

Mrs. G—, a young married lady, was admitted to a private ward in July last, under the care of Dr. T. C. Fennell. Four years previously, after a protracted labor of four days' duration, she was delivered of a large dead child. Sloughing of the anterior wall of the vagina and the contiguous part of the bladder, was the consequence, followed by the usual distressing symptoms, and with constriction of the vagina after cicatrization. The opening was about two inches above the meatus, with the shape of a transverse double convex slit, and large enough to admit two fingers of moderate size. Some time previous to the regular operation, preliminary steps had been taken in order to restore the vagina to its former dimensions, curtailed by the cicatrix. When this had been effected, the more important part of the operation was commenced. Ether was administered, and when anaesthesia was produced, the patient was placed on her knees, with the upper part of the body resting on the crossed arms which supported the head, while two assistants, by means of a folded sheet placed under her belly and chest, kept the patient from sinking down, otherwise. Another assistant kept the vagina dilated, while the Doctor proceeded to pare the edges of the fistula. When this was effected, three sutures were inserted, the clamps applied, and the ends of the wires twisted; this approximated the lips of the fissure accurately. The canula was then inserted in the urethra; this was kept in situ for three days, when it had to be removed, owing to the unpleasant irritation produced. After this, she was able to retain water for six hours together, and no untoward symptom occurred. On the 15th day after the operation, the apparatus was removed, and, though a slight leak was apprehended, the fistula was found, after several days observation, to have been closed completely.

PENNSYLVANIA HOSPITAL.

[Service of Dr. HARTSHORNE.]

Compound Fracture.—A man had just been admitted with a compound fracture of both bones of the forearm, caused by his hand being caught in some machinery. The edges of the lacerated wound were drawn together by the leaden sutures, the arm placed on a Bond's splint, the wound covered with the lead water and belladonna, and the whole maintained in an inclined plane, to permit irrigation by a constant stream of cold water.

Strabismus.—Dr. H. then operated on both eyes of a little boy with strabismus. Ether was given to keep him quiet, the conjunctiva and orbicular fascia divided by means of the scissors, the tendon of the internal oblique hooked up and divided. After this the eyes were put at rest by closing them with the ising glass plaster.

Operation for Varicose Vein.—Dr. H. next introduced a man with varicose veins on the right leg. These often ulcerated, and interfered with his means of getting a livelihood. A bandage was then bound tightly around the leg, above the knee, while the patient remained standing, and the operator introduced a silver wire, passing it beneath the internal saphena vein. Two of these were passed in, the second one unintentionally transfixing the vein, which bled freely, but was readily controlled by pressure. A leaden button was then placed on the vein, the wires passed through it, and clamped over shot. By this means a uniform compression is kept up, and the vein obliterated. Two veins were thus compressed by two buttons, and the limb supported by the application of the soap plaster and a bandage. Dr. H. remarked that he had employed this, the method of Bozeman, but preferred the use of the Vienna paste.

LONG ISLAND COLLEGE HOSPITAL.

RUPTURE OF THE LIVER—DEATH FROM THE SHOCK AND HEMORRHAGE.

[Reported by Rufus K. Brown, M.D., Resident Surgeon.]

PAT. Carroll, æt. 19, admitted under the care of PROFESSOR HAMILTON, July 2d, 1860. A few minutes before entrance he had been struck over the right hypochondriac region by whiffletree. He was driving a team attached to a heavy load, when one of the traces broke and the corresponding end of the whiffletree struck him with great force. On examination we found an abrasion of the skin just below the ribs of the right side, and extending across the body about four inches. The patient was pale, his pulse small and frequent; skin cool, vomited frequently and was unable to expel his urine; the abdomen was tender at the point of injury, pain slight. Dr. Hamilton diagnosticated rupture of the liver, and expressed his conviction that death would ensue. Warm fomentations were applied to the abdomen; a catheter was introduced; and he was directed to take pills of opium if the pain increased. Gradually the tenderness was diffused over the whole abdomen, but it was never considerable except at the point of injury. It is not certain whether the inability to expel the urine, which lasted until death, was due to the peritonitis or to the shock—the same phenomena being often observed in idiopathic peritonitis. His death took place twelve hours after the injury.

Autopsy, twelve hours after death.—The anterior margin of the right lobe of the liver was ruptured to the extent of about four inches in a transverse direction, and more or less in a vertical direction. The abdomen contained a large mass of grumous blood, with very little coagulable lymph and serum.

American Medical Times.

SATURDAY, AUGUST 25, 1860.

RATIONAL MEDICINE.

MEDICAL science and Medical practice have ever been alternately the themes of exalted panegyric and unwarranted criticism. While Plato utters his profound convictions that a true physician is second only to Deity, and gravely declares that medical counsels are essential to the welfare of the community and the state, Cato,—in his ignorance and conceit—vehemently and blindly denounces both medical philosophy and physicians. And in these latter days, when accuracy in diagnosis and pathology has become the chief glory of modern medicine, there are not wanting, among the learned and the unlearned alike, those who affect to deride the progress and the applications of medical knowledge, notwithstanding its improvements and the greatly increased certainties of the healing art. On the one hand, a class of conceited critics declare that medicine must be regarded as a "withered branch of science," unless it affirm and demonstrate its progressive steps with mathematical and axiomatic assurance; and, on the other hand, there are, in fashionable society, multitudes of people who prefer the glimmering fantasies and follies of Hahnemann to the certainties and the intelligent ministrations of true medical science. And not least among the influences that serve to disparage medical art, and encourage irrational practice, may be mentioned—extreme statements of medical opinion—statements usually based upon misinterpreted observations and unsound logic. But in all departments of progressive philosophy it is observed that conflicting opinions and extremes of departure from philosophical accuracy and truth always constitute the "counter-currents" of scientific progress; while by a sort of *reductio ad absurdum*, or by an *experimentum crucis* process—which such errors and departures from a true philosophy are ever repeating—those very errors and episodes in the progress of medical knowledge indirectly and continually serve to establish the *true* and abate the *false* in science and in practice.

Not physicians only, but *doctors* in every department of human philosophy, are prone to "disagree." The manner and the subject of such disagreement, however, should be both a matter of taste and of principle; but this point is too generally disregarded in the eager pursuit of personal distinction and the prowess of a triumph. In the progress of knowledge, collisions of opinion and errors of judgment are inevitable; and in no department of learning are such errors and collisions more liable to occur than in medicine—a science dependant mainly upon observation and induction, and requiring for its full comprehension and best service, the highest powers and widest scope of the human mind. Errors of observation, and defective or faulty induction, have, in all ages, originated the most obstinate fallacies in medical philosophy and practice. But no such fallacies are incurable; corrected observations, enlarged research, logical induction, and varied provings, will always bring the physician back to the path of sound philosophy and rational practice.

The careful observation of Nature's processes in disease and in health enabled the great Coan Father of Medicine to lay a sure foundation for medical philosophy. He was the first great teacher of Rational Medicine, and as the advocates of rational philosophy in the healing art at the present day have adopted some of the conclusions of that ancient father, it were well they should also adopt more of his philosophical and careful habits of induction and statement. He inculcated his doctrines, not by disparaging or denouncing the labors and opinions of other men, but by plainly interpreting nature's works, and modestly pointing out the indications of true philosophy and an enlightened experience. While refuting the peculiar errors of the Cnidean doctrines, Hippocrates carefully mentions all that is true and practical in them, and then simply declares that "the authors of the Cnidean sentences very accurately described what symptoms the sick experience in every disease;" and, after admitting that those reclusive philosophers learnedly treated of the remedies applicable to each complaint, he proceeds to show that they not only multiplied the names and species of disease by the number and variety of their symptoms, but, worst of all, they wholly neglected the subject of regimen, and the study of Nature's indications. And then, without even suggesting the propriety or the consequences of casting the whole *materia medica* into the sea, he assumes the dignity of a great Teacher, and impressively says:—"I approve of *paying attention to everything relating to the art*, and that those things which can be done *well* or *properly* should be done properly; such as can be *quickly* done *should be done quickly*; such as can be neatly done should be done neatly. . . . But I would more especially commend the physician who, in *acute diseases*, by which the bulk of mankind are cut off, *conducts the treatment better than others*."

Certain recent publications of living authors, and the discussions awakened by them, have reminded us of these sayings of the ancient fathers, though the modern and the ancient teachers of Rational Medicine differ widely in their modes of instruction. Nature and Art in the process and cure of Disease, as recently expounded by Sir John Forbes, and Dr. Jacob Bigelow, have had their respective claims held up to a searching review; and, a few weeks since, in the Asclepion of the American Athens, a poet-physician ventured to discourse upon the "Currents and Counter Currents in Medical Science;" and so facetiously, boldly, and invidiously, did that chosen Apollo of the Massachusetts State Medical Society compare the relative merits of the Hippocratic and the Themisonic modes of practice, that he, whose sparkling wit was wont to excite only the most fraternal feelings, now—not only aroused his associates to censure and alarm—but has raised about his own ears the cry of heresy in medicine.

Had the drug stores of Milk Street and Bowdoin Square fallen to the ground, or been wrapped in conflagration during the last two months, the unfortunate orator of the Massachusetts Medical Society might have fared worse than the Coan philosopher, when the library of the Cnidean Temple was burned, for he has excited a controversy more vehement than that which existed between the Cnideans and the Coans. But the Harvard professor and poet yet survives, and the Drug trade still flourishes in Boston and elsewhere.

It was easy to say just what Dr. Holmes said *offensively*, in his recent oration; but with the license pardonable in the poet-physician and "Autocrat of the Breakfast Table," it

really appears unnecessary that even the boldest sallies of his wit, or the most extravagant suggestions he could utter, should, in anywise perturb the even tenor and the progressive spirit of the Medical mind in these United States. We confess that we have perused this production of Dr. Holmes with the same feelings and the same convictions we had while reading the little brochures of Sir John Forbes and the venerable Dr. Bigelow, on Nature and Art in Disease. Such writings *properly interpreted*, will do no harm, and, among certain classes, they should do much good. Yet we cannot avoid the conviction that, among those practical men who attend to most of the sickness which *requires* medicine, such modes of instruction as Dr. Holmes has adopted, will tend, like many of the hasty announcements of medical theorists, merely to confirm such practitioners in the unfortunate conclusion that—

"Others follies teach us not,
Nor much their wisdom teaches;
And most of sterling worth is what
Our own experience preaches."

Dr. Holmes's address contains some passages that certainly deserve the criticism they have received, but we will here only note the spirit and indications of such productions with reference to the present status and progress of medical knowledge and rational practice. Our Boston brethren certainly witness a good confession when they testify, that common sense and common honesty in the practice of medicine, are followed by good results. But why defy Nature, when God has exalted Reason! Our medical creed permits the use of material agents, in any quantity and at any time, directed by reason and experience, to aid or to control the processes of disease. And this, too, is *rational* medicine and sound doctrine.

The gifted Huefland long ago said, that "there has always been a 'true church' in Medicine;" and the history of the profession, from the earliest historical ages, illustrates the significance and truth of that remark. The faithful worshippers in its temples do not worship false gods which their own hands have set up, nor have its ministers led their followers away from Nature and the truth. Hippocrates, Galen, Celsus, Boerhaave, Haller, Sydenham, Huxam, Blane, Jenner, and all the recognised lights in the history of the healing art, have inculcated the same true and fundamental philosophy of medicine. They all taught that the physician should first observe and study Nature's processes and indications in health and disease. One by one, in a brilliant succession of names consecrated to medical progress, the true successors of those fathers have helped to lay open the more occult causes and consequences of disease; and all these contributors to medical science have been faithful students of Nature,—while with microscope and alembic they have sought a rational and more definite interpretation of those phenomena which the fathers were unable to solve. The science of medicine does not consist in mere alipharmic knowledge and the nomenclature of diseases and their symptoms. As has been tersely stated by Hippocrates, "It is the business of the physician to know, in the first place, things similar and things dissimilar; which are to be perceived by the sight, and the touch, and the hearing, and the nose, and the tongue, and the *understanding*." It is the glory of true medical philosophy that it traverses the whole field of Nature, and freely sub-

sidizes to its beneficent purposes every natural element and every proper appliance of science and art. It has been thus in all ages. And if, at the present day, it is the spirit of medical philosophy to push boldly forward, and fearlessly to enunciate its propositions and discoveries, let it be remembered that "it is a great part of the art to judge properly of that which *has been written*." Sydenham, Harvey, Jenner, and Laennec, humbly built upon foundations that their predecessors had laid, while they acted as the great interpreters and ministers of Nature. And, like all true physicians who have preceded them, the progressive minds of our profession at the present day are continually adding enduring stones to the Temple of Rational Medicine.

We have before us an oration on the Position and Prospects of Rational Medicine, recently delivered before the members of the Hunterian Society, by Dr. Ward, of the Dreadnought Hospital. And we are pleased to notice how rationally that gentleman has treated and illustrated his theme. On another page we have given his very sensible observations on the natural history and the rational treatment of typhoid fever (see page 129). But after all that has been written upon Nature in Disease, it manifestly appears that the lessons so earnestly taught by Sir John Forbes, and Drs. Bigelow, Ward, and Holmes, do not actually convey any *new* truths or propound any doctrines that have not been incorporated in the acknowledged creed of "the true church in medicine" for the last two thousand years; and, in some respects, we confess that the ancient are more instructive and classical than these recent prelections upon the great fundamental doctrines, now invidiously distinguished as the principles of Rational Medicine.

We have been wont to consider that all practical philosophy in medicine is *rational* and true. And as we contemplate the character and labors of the "representative men" in our profession, who have ever been at once the ministers of Nature and the conscientious cultivators and ministers of art in the practice of medicine, we discover the surest remedy for those vain conceits and errors in philosophy and practice which produce the "counter-currents" in medical science and practice. Rational Medicine will be triumphantly ascendent when every physician at the end of his career can say, with old Cerimon,—

"I held it ever,
Virtue and knowledge were endowments greater
Than great nobility and riches."

And both "Nature-trusting" and the Nature-guiding physicians might profitably listen as that ideal confession of an honest medical life, sketches the physician's relation to Nature and art in the cure of disease:—

"Have studied physic, through which noble art,
By turning o'er authorities, I have
(Together with my practice) made familiar
To me and to my aid—the bless'd infusions
That dwell in vegetives, in metals, stones;
And I can speak of the disturbances
That Nature works, and of her cures; which gives me
A more content in course of true delight
Than to be thirsty after tottering honour,
Or tie my pleasure up in silken bags,
To please the fool and death."

THE WEEK.

STATISTICS of Disease and of Health are strongly recommended to the attention of political economists and moral reformers by Florence Nightingale, in a letter to the Earl of Shaftesbury, read before the International Statistical Congress last month. Her suggestions are worthy of universal attention. She says,—“There must be a large amount of statistical information, bearing on the prevention of disease, in possession of the governments of different countries, and it would be of great importance at the next meeting of this congress, if each delegate would include in any report to be presented, any marked examples of diminution of mortality and disease, together with the saving of cost consequent on the carrying of sanitary improvements in towns, in dwellings of the laboring classes, in schools, in hospitals, and in armies. As for example, it is stated to be a fact demonstrated by statistics that in improved dwellings the mortality has fallen, in certain cases, from 25 and 24 to 14 per 1000, and that in “common lodging-houses,” which have been hot beds of epidemics, such diseases have almost disappeared as heads of statistics through the adoption of sanitary measures.”

“It is also stated that in the British army large bodies of men, living under certain improved sanitary conditions, have presented a death-rate about one-third only of what the army has suffered in past years.”

Miss Nightingale asks that such Statistics of Health may be carefully collated and compared with the ordinary statistics of mortality. We trust that the International Congress did not adjourn without heeding the suggestion. The great practical value of sanitary statistics, and the records of disease, render it desirable that such statistics should be publicly recorded wherever and whenever opportunities are found. A noble example of voluntary labors for this object is now seen in the State of New York, under the direction of the State Medical Society; and the first great contribution—from the late distinguished president of the society—Dr. Brinsmade of Troy, is worthy of general imitation by medical practitioners. But in addition to records of disease it is desirable to secure accurate statistics of health, in connexion with improved conditions of domiciliary and external hygiene; the improvement of workshops, schoolrooms, regulated hours of labor or study; improvements in diet and in exercise.

A SINGULAR case of mal-practice on an infant is reported in this city. The coroner's inquest elicited the following facts:

Robt. Foster, the father of deceased, testified that he resided at No. 159 East Eleventh street, and that the babe was born on the 1st inst.; Dr. Burke, of Grand street, was the attending physician, but subsequently Dr. Allen came to his house and stated that in the absence of Dr. Burke from the city, he had been deputed to attend his patients. On the occasion of Dr. A.'s second visit Mrs. Foster told him that the infant was laboring under an attack of diarrhoea, when he wrote a prescription of powders, one of which was to be given at night, and in case it failed to afford relief, another was to be administered in the morning; the prescription was made up at Dr. Powell's drug store, in avenue A., but the clerk remarked that it was too strong a dose for a child, two grains of opium forming a part of it; he told the clerk not to make it so strong, when the latter replied it was not his business but that of the doctor who

wrote the prescription. On taking the medicine home, only one-half of one of the powders was given to the child, and fifteen minutes after it had been administered the infant was thrown into convulsions in which it continued in intervals until one o'clock the next afternoon, when death resulted. Prior to the death of the child, Dr. Allen had been called in, when the doctor remarked that the child had been poisoned, and that wrong medicine had been given it, adding, that either he or the druggist had made a mistake; the prescription shown was the one that he wrote, and the medicine that which he procured from the druggist; he did not believe that the child swallowed more than one-half of the powder that was given it.

The physician, Dr. MACDONALD ALLEN, testified as follows:—

“I reside at No. 447 Grand street, and am a physician; I called to see Mrs. Foster at the request of Dr. Burke, who had charge of her previously; on Monday I prescribed the prescription shown, and the next day I was called by Mr. Foster, who stated that the child was in convulsions; I went home with him, when he remarked that the druggist who had made up the prescription had said it was very strong for an infant; I prescribed two grains of opium in four powders; I did not intend to give opium at all, but intended to give rhubarb; I have had considerable trouble of late in my family, and my mind was somewhat discomposed in consequence; I had an adult patient suffering from dysentery, and I must have been thinking of the medicine for him when I prescribed for the child; the dose would have been proper for an adult.”

The druggist who put up the prescription, testified:—

“I reside at No. 163 avenue A, and am employed in Dr. Powell's drug store at that place; I have been three years in the business and have attended two courses of lectures at the Thirteenth street Medical College; I put up the prescription shown, but supposed, as it was intended for a child, that it would have been subdivided into smaller powders.”

The jury returned the following verdict:—

“That deceased came to his death from convulsions produced by an over-dose of opium, administered by Dr. Macdonald Allen. The jury believe the physician was guilty of gross carelessness, and we further censure the druggist for not warning the father of the danger of administering so large a dose of opium to so young a child.”

After the rendering of the verdict Coroner Gamble announced that he should hold Dr. Allen in the sum of \$500 to answer before the Grand Jury. The doctor was then examined in the prescribed manner. He stated that he was a native of Scotland, 25 years of age, and a physician by occupation. In relation to the charge against him he replied:—

“My mind was very much troubled when I ordered the medicine. Although I very much regret having administered opium instead of rhubarb, I do not think that the death of the child was occasioned by the opium it took on account of the small quantity it swallowed and the length of time (sixteen hours) that elapsed before it died. The mother states that only one-third of a powder was given which reduces the dose to one-sixth of a grain, and the father states that one half of that quantity was lost in administering it.”

The doctor subsequently obtained bail and was released from custody.

The censures of the jury in this case were merited. More culpable carelessness in a physician than that acknowledged by Dr. Allen can scarcely be conceived, and yet grave mistakes do occasionally occur with the best practitioners. In such instances the druggist has a plain duty to perform

which, if he neglects, should render him *particeps criminis*. The plea that it is "not his business, but that of the doctor who wrote the prescription," should be held as valid as if he had witnessed a murder with folded hands. The following judicious views of an eminent pharmacist, SAMUEL M. COLCORD, of Boston, on the relations of the apothecary to the physician and patient are such as govern the best class druggists:—

"Our first duty, as conscientious pharmacutists, is to have a thorough knowledge of our profession; then, as occupying an important position, and as co-laborers in the benefits to be derived from medical science, our duty is clearly to protect the public, and do the best that can be done for our customers who confide in us, in our department. Equally with the physician in his, I hold that we have no right to jeopardize the health or life of the patient by any doubtful interpretation of a prescription, or even put up a dangerous prescription correctly written when we are sure that we know the dangerous consequences better than the prescriber."

By a decision of the Superior Court, Leonard J., it was last week decided that the Marine Hospital, as a State institution, has not been abolished by the substitution of Floating Hospitals for the sick with yellow fever and cholera, and the transfer of other diseases to the various institutions on the islands of the East River. Upon this decision the Judge ordered a peremptory *mandamus* to be issued for the payment of Dr. Jerome's claim for salary as chief physician under State appointment. Though the Marine Hospital is constructively and actually abolished as a hospital establishment, all the sick being elsewhere provided for, this litigation illustrates the imperfections of New York legislation relating to quarantine. Whatever may be thought of the decision, it is certain that the five thousand dollars which it brings to Dr. Jerome but poorly repays his twelve months absence from a lucrative country practice.

Reviews.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF LONDON. Vol. I., for the year 1859: together with a report of the Inaugural Meeting of the Society, a list of Officers, Fellows, etc. London: Longman, Green, Longman, & Roberts. 1860. pp. 347.

THE founding of the Obstetrical Society of London, as we learn from the proceedings of the inaugural meeting, held Dec. 16, 1858, met with strong opposition; but whatever the nature of the arguments raised against it, the present volume of Transactions—the standard by which its necessity and usefulness are hereafter to be decided, is sufficient vindication of the wisdom of its projectors. The volume contains forty-one papers on subjects relating to obstetrics, and the diseases of women and children. Many of these papers are of great interest, and will have a decided effect upon practical obstetrics. We may instance No. II. in the collection, "On the Abolition of Craniotomy from Obstetric Practice in all cases where the Fœtus is living and viable," by Dr. TYLER SMITH; No. XI. "Some recent Cases (fourteen) illustrating the Physiology and Treatment of Placenta Prævia," by Dr. ROBERT BARNES; No. XIX, "The

more frequent Use of the Forceps, as a means of lessening both Maternal and Fœtal Mortality," by Mr. Philip H. Harper; No. XXIX. "On the Hydatidiform or Vesicular Mole, its Nature and Mode of Origin," by Dr. GRANTLY HEWITT. Many very interesting cases are reported in detail with practical remarks by the authors. The volume is beautifully illustrated. The annual subscription to this Society is One Guinea, which entitles the member to a copy of the Transactions.

AN ESSAY ON HERNIA. By JAMES BRYAN, A.M., M.D., Professor of Anatomy in the New York Medical College. Philadelphia: 1860. Quarto, pp. 14.

THIS Essay is published in quarto form, only for subscribers. The design of the author is stated in the preface to be to produce a work in the best style of art, under the impression, "that an American production, with illustrations drawn from every-day practice, on a subject of so much importance, and of so common occurrence in the experience of the practitioner as Hernia, might be acceptable to the student and junior practitioner." The lithograph which accompanies the Essay is a fair illustration, and the text is a simple description of hernia.

THE LONDON MEDICAL REVIEW. Monthly. No. II. July, 1860. London: H. Baillière, 219 Regent St. New York: Baillière Brothers, 440 Broadway. 8vo. pp. 51.

THE appearance of another well-printed, and ably edited review, as a candidate for medical favor in the British metropolis is an event significant of the progress of medical journalism, if not of scientific medicine. The first number of the *London Medical Review* was issued on the 1st of July, and it is hereafter to be published monthly. From the brief preface we gather that this is not to be altogether a review, but will have many of the characters of a general periodical. The present number contains four original articles; five review articles; a report from the Middlesex Hospital; a report upon the progress of chemical science in connexion with medicine, etc., etc. From the character of the articles in this initial number, and the names associated with them, we may safely predict that this review is to take an important place among British periodicals.

CUBA FOR INVALIDS. By R. W. GIBBES, M.D., Columbia, S. C. New York: W. A. Townsend & Co. 1860. pp. 214.

THE author of this little work, the editor of the State paper of South Carolina, and the Registrar of that State, has given an account of his travels in Cuba in search of health. He first visited Havana, but finding the air unsuited to him he subsequently visited Trinidad de Ouba. The climate of this place is strongly recommended by Dr. Gibbes for persons suffering from lung affections. He gives, on page 57, the monthly range of the thermometer for the year, the maximum being 92° in July and August, and the minimum 56° in January; mean heat of thirteen years, 80.1. The work abounds with descriptions of scenery, observations upon the habits and manners of the people, and facts and figures illustrative of the agricultural and commercial interests of Cuba. It will prove a valuable guide to travellers, and especially invalids who seek a temporary residence in Cuba.

Progress of Medical Science.

PRACTICAL MEDICINE AND THERAPEUTICS.

Symptoms of Inflammation in the part of the Cord from which originate the Nerves of the Lower Extremities. By DR. BROWN-SÉQUARD. (*Lancet*, July 14, 1860.)—The characteristic symptoms of this local myelitis are: 1st. A constant pain at the part of the spine corresponding with the upper limit of the inflammation of the cord. 2nd. Whether a constant pain exists in a very marked degree or not, it is almost always found that pressure upon the spinous process of the vertebrae (sometimes even a slight one), when made at the upper limit of the inflammation, causes an acute pain. 3rd. The passage of a sponge, filled with warm water, along the spine, gives a normal sensation of heat in all the parts above the seat of the inflammation, but a burning sensation at its upper limit. 4th. The passage of a small lump of ice along the spine gives the natural sensation of cold everywhere, except at the level of the inflammation, where the sensation is that of burning. 5th. Most patients complain much of a sensation as if there were a cord, or some other ligature, tied round the body, at the limit of the paralysis. In a few patients there is but a very slight sensation of that kind. This symptom seems to exist in all cases of myelitis, and to depend chiefly, but not entirely, upon a state of cramp of some part of the muscles of the abdomen or the chest. 6th. Various sensations, resembling very much those which follow the pressure upon a nerve, such as formication, pricking by pins and needles, and sometimes a feeling of burning or intense cold in the feet, legs, and thighs, less frequently in the abdominal walls. These sensations exist with as much, if not with greater, violence, in parts deprived of sensibility, as in parts which are still sensitive. They originate from the irritation of the grey matter of the spinal cord, and are referred to the limbs and abdomen, just as the pressure upon a nerve produces sensations in its ramifications. They are important indications of myelitis. 7th. Cramps in the feet or calf of the legs are very frequent. There are more or less of them in every patient. Frequently there are cramps also in the large abdominal muscles, besides the circular and linear cramp that gives the above-mentioned feeling of tightening. A cramp limited to a part of one or several abdominal muscles may remain almost permanently for days and weeks, forming a kind of lump, which may be mistaken for a tumor. 8th. Whether myelitis exists only in a small zone of the spinal cord, or occupies the whole of the dorso-lumbar enlargement, the paralysis of movement exists in all the parts of the body that receive their nerves from the portions of the spinal cord that are below the upper level of the inflammation. The degree of paralysis varies extremely in different patients, but it is nearly the same in the various muscles of the lower limbs in the same patient. 9th. Paralysis of the bladder and of the sphincter ani is almost always present in inflammation of the lower part of the dorsal region of the spinal cord; but when the seat of the inflammation is higher up in the dorsal region, there is rather a spasm than a paralysis in the sphincters of the bladder and anus. Often then there is retention of urine, owing to the paralysis of the bladder while the sphincter vesicae is more or less in a spasmodic state. 10th. One of the most decisive symptoms of myelitis is the alkalinity of the urine. There is no patient attacked with myelitis in the dorsal region of the cord whose urine is not frequently alkaline. At times, especially after certain kinds of food, the urine is acid, but the alkalinity soon reappears. 11th. Anæsthesia, or at least a diminution of sensibility, always exists in myelitis, except when the grey matter is not the seat of the disease, which is very rare. Usually, the inflammation begins in the central parts of the grey matter, and then a diminution of sensibility is one of the first symptoms. That peculiar kind of sensibility of muscles which serves to direct

our movements is especially impaired in the very beginning. 12th. When the dorso-lumbar enlargement is inflamed, reflex movements can hardly be excited in the lower limbs, and frequently it is impossible to excite any. On the contrary, energetic reflex movements can always be excited when the disease is in the middle of the dorsal region, or higher up.

Iodide of Iron. By DR. COLLIN. (*Med. Times and Gazette*, June 16, 1860.) This substance was first introduced into practice by Dupasquier, of Lyons, and has gained considerable repute. Dr. C. had employed it with good results in the general struma of children, phthisis, and chronic pneumonia, and now proposes to test its virtues in the treatment of consumption. The twenty-five cases upon which it was tried were not selected, but taken just as they arrived at the Consumption Hospital, those only being excluded which were either at too advanced a stage to admit of any remedial treatment, or which happened to be laboring under some inflammatory, or important complication. The iodide was administered in the form of the syrupus ferri iodidi mixed with water, in doses of a drachm, twice, and sometimes three times a day. It was continued, according to its effects, for various periods; the shortest being one month, and the longest three months. Of the twenty-five patients, eleven were males and fourteen females; their ages varied from eighteen to forty years. Eight were in the first stage of the disease; three were in the second stage; and fourteen presented positive evidence of pulmonary cavities. In ten cases there was great improvement; in four moderate improvement; and in eleven no improvement. In analysing these results, it was found that of the ten greatly improved four were in the first stage of the disease, and six in the third. Of the four moderately improved, one was in the first stage, one in the second, and two in the third. Of the fourteen in whom no improvement was noticeable, three were in the first stage, two in the second, and nine in the third. Three cases of improvement were very decidedly marked; two of these patients, whose disease was only in the first stage, left the Hospital with their pulmonary affection quiescent, and apparently restored to health, calling themselves, indeed, 'quite well,' and the other, although more advanced and in the third stage of phthisis, was marvellously improved, and able to resume his occupation. In two cases hæmoptysis came on during the administration of the iodide, and in two the iodide was discontinued on account of headache and dyspepsia. The spitting of blood probably was in no way attributable to its use, hæmoptysis having occurred previously in the same patients; but the other symptoms, having ceased or diminished with a change of medicine, might perhaps fairly be referred to its employment. Except in these instances, the iodide of iron appeared to agree very well with the patients, several or whom improved very much in appetite and strength. Three of the patients in whom there had been no improvement afterwards derived benefit from other medicines. In eight of the cases, cod-liver oil was occasionally taken in combination with the iodide; one-half of these were found to belong to the class of improved, the other half to that of not improved. Of the fourteen improved cases ten gained in weight, some of them very considerably, three remained *in statu quo*, and one lost two pounds while under treatment. The improvement, however, was not always in proportion to the increase of weight, some of the patients who had increased the most having improved the least.

On Congestion of the Heart and its Local Consequences. By DR. JENNER. (*Lancet*, July 14, 1860.) The objects of this paper were to call attention to the occurrence of congestion of the muscular tissue of the heart, to the most common and direct consequences of that congestion—viz., induration and toughening of the walls of the heart, and to the influence which those changes of texture exercise on the development of dilatation of that organ, by rendering permanent every increase in capacity from over-distension, which would be temporary in a heart whose walls were normal.

Impediment to the passage of the blood, Dr. Jenner said, through the right side of the heart, whatever its cause, must be attended by over-distension of the veins of the heart; and as very gradually developed, long-continued intermittent congestion of any organ, the functions of which are over-actively performed, notwithstanding its congestion, is followed by induration, toughening, and hypertrophy, so the walls of the heart will, under the conditions specified, become harder, tougher, and thicker than natural; and as these changes in the texture of the walls of any hollow viscus are the conditions which determine the occurrence of permanent dilatation of that viscus, when pressure on the inner surface of its walls is sufficient to over-distend them, so when these changes affect the walls of the heart, and there is great impediment of the escape of blood from its cavities, they lead to its permanent dilatation.

New Mode of applying Chloroform in Neuralgia. By Mr. LITTLE. (*Edin. Med. Journal*, April, 1860.) From observing that the lips of the patients were partially blistered after inhaling chloroform, Mr. Little was led to try the effects of this agent when applied locally. He first covered it with oiled silk and gutta percha, but without success; he then used a watch glass to cover the lint soaked in it, with the best effect. He has thus applied it in neuralgias of the face, angina pectoris, lumbago, dysmenorrhœa, and allied affections.

Subcutaneous Injection of Acetate of Morphia in Delirium Tremens. By Dr. OGLE. (*Med. Times and Gaz.*, July 21, 1860).—Dr. OGLE reports a case of delirium tremens which was first treated with chlorodyne, and chloroform inhalations, but without success. He then injected one grain of acetate of morphia in solution into the cellular tissue of the arm, and in about an hour the patient fell asleep, and slept five hours, waking quite rational.

Catheterism of the Larynx in Diphtheria. (*Lancet*, July 14, 1860).—A very careful investigation of this method of treatment has just been concluded. It had been carried on by a committee appointed by the Medical Society of the Hospitals of Paris, in order to answer the following question put by the Director-General of Hospitals:—Has catheterism of the larynx in diphtheria, as recommended by M. Loiseau, been successfully employed in the hospitals of Paris? The committee was composed of Messrs. Béhier, Monneret, Roger, Sée, and Barthéz, the latter of whom drew up a very careful report filled with interesting facts, and very legitimate deductions.

The committee think that M. Loiseau's treatment is not so successful as might, from his assertions, have been expected. The local manifestations have sometimes been favorably modified by it; but it does not check the disease—does not prevent its transformation into croup, and is not more efficacious than the remedies usually employed. The catheterism of the larynx, as practised by M. Loiseau, is not a difficult operation, and has afforded temporary relief to some patients. It has cured four out of twenty-six cases; whilst tracheotomy and the internal treatment were successful in nine cases of these same twenty-six, after M. Loiseau's treatment had failed. The operation is not free from danger, as it caused the instantaneous death of a child upon whom it was performed. This catheterism, in several cases, did harm, and had to be followed by tracheotomy. The committee are, therefore, of opinion that this mode of treatment cannot as yet be substituted for the means hitherto employed, and should not, as M. Loiseau wishes, make us give up the administration of internal medicines; nor should tracheotomy be replaced by this method, as the operation is pre-eminently useful in surgically removing the obstacle which prevents the air from reaching the lungs.

On the use of Chinoidine in Periodical Fever. By Dr. CAIN. (*Charleston Med. Jour. & Rev.*, July, 1860.) Chinoidine being about one-fourth the cost of quinine would be a very desirable substitute if its therapeutic properties in periodical fevers were as great. Dr. Cain has put it to a practical test, and reports very favorably. He prescribes it

in the same manner as quinine, proportioning the dose to the type and grade of the fever; the form of pill is preferable.

Of fifty-four cases of intermittent, three terminated fatally; of these, one was in a profoundly adynamic state at the time of admission, and two died of delirium tremens, each on the fourth day after the cessation of the fever. Thirty-four had no return of the paroxysm; five had an abortion of the paroxysm; four had one; six had two, and one had three slight paroxysms; one had one, and two had two violent paroxysms after the commencement of the treatment. The types were the quotidian, single tertian and double tertian; forty-four quotidian, nine single tertian, one double tertian. Of the grades, five were of severe, forty-nine were of mild, medium grade.

Reports of Societies.

NEW YORK MEDICAL AND SURGICAL SOCIETY.

Dr. GEO. WILKES, President, in the Chair.

FEB. 4TH, 1860.

DISCUSSION ON DIPHTHERIA.

(Continued from page 128.)

Dr. CLARK stated that on the evening after the last meeting he was called in consultation by Dr. Crane to visit a family in Elizabeth, N. J. Six, out of eight, children were suffering at the time from scarlet fever, and one was lying dead in the house. Three out of the six children presented diphtheritic membrane in the fauces, and the remaining three had swollen tonsils with more or less inflammation of the throat. One of them had some white spots upon the inner surface of one of the tonsils, which at first looked a little like membrane, but afterwards turned out to be nothing more than a white secretion in the follicles. Two of them were at that time, as we supposed, desperately sick, and in one of these the membrane was distinctly discoverable in the nasal passages. The voice was a mere cry. The breathing was not as much obstructed as in croup, but sounded as if a valvular structure was playing up and down over the opening of the larynx; and we took it for granted that if the membrane had not already, it would eventually, extend into that portion of the breathing apparatus. The pulse was 140, and the intelligence nearly abolished. The patient was lying with her eyes closed, paying no attention to anything that was said, and considerable force had to be used to open the mouth. She moaned with almost every breath, though occasionally she would get a little quiet and seem to be asleep. This child finally recovered.

In one of the other children, the nasal passages were entirely plugged up by the drying of the secretions that flowed down from the external opening. The constitutional symptoms with him too were very marked. His pulse was the same as the others, but instead of being semi comatose, he was restless, dozing continually. He lived nearly a week from the time I refer to, and apparently died from exhaustion, the result of the occurrence of numerous ulcerations very much after the manner of bed sores. It struck him that this latter feature of the disease was an evidence of the constitutional influence of the poison. The father, who was fifty-seven years of age, also had the diphtheritic exudation in the fauces, but in him none of the symptoms of scarlet fever had presented themselves. He, however, had the same character of valvular breathing as noticed in the daughter. His tonsils and velum were very much swollen, and the glands on the outside of the neck moderately so. The moment he lost consciousness in sleep his breathing would stop as if something had passed into the opening of the

larynx and prevented the entrance of air. The inspiration alone was obstructed. His friends were unwilling to allow him to sleep at such times for fear he would suffocate. This difficulty of breathing did not seem to me to be dependent upon the existence of a membrane, but upon the swollen condition of the hanging portion of the fauces, which dropped fairly down upon the top of the larynx. As soon as the inflammation subsided this symptom passed off. At the time we saw him he had been in a state of active delirium for forty hours; his pulse was about 100 per minute. He finally recovered. The treatment for all these cases was about the same; pretty active stimulation with alcohol and the very free use of the sulphate of quinine, and the local application of nitrate of silver in solution. There was a circumstance that interested me in connexion with the two children who had the membrane in its worst form, relative to scarlet fever. In the girl, the eruption was out full for eight days, and when we saw her was perhaps subsiding a little; in the boy, the symptoms had been out eleven days, and was still vivid. Desquamation was quite active, and the scales were standing out, attached to the surface by their edges, in all possible directions; rubbing these off, the eruption could be seen as on the second or third day. The urine in these cases was not examined.

Dr. WILKES stated that he had met with an attack of diphtheria in a patient seventy-two years of age.

Dr. MCCREADY within the last four weeks had been called to four cases of diphtheria following scarlet fever; two of these terminated fatally very soon after he saw them. In both the pulse was exceedingly frequent; there was a good deal of restlessness present, and the membrane covered the posterior part of the fauces, extending to the windpipe. The third case was somewhat similar in character as far as symptoms were concerned.

The first case was one of those which some time ago would have been called croup. I was called in consultation to see a stout boy, three years of age, with a pulse not much over 100, skin a little warm, and face somewhat flushed. I was told that there was ulceration about the throat, but no false membrane. On examination, however the so-called ulceration was found covered with an ashy-colored patch of membrane, the child was also quite hoarse, and had the regular croupy cough. I did not see the case a second time, but read of its fatal termination a week after in the newspaper. The case agreed in every respect with the description which foreign writers give to croup.

Dr. WATTS had seen one additional case since the last meeting:—A young lady, twenty years of age, was attacked on Wednesday last with what she supposed to be "chills and fever." She had a fair chill, followed by fever, a good deal of pain in the back, and also a sore throat. I was sent for on Thursday afternoon, about thirty hours after she was first attacked. Her pulse was 130; she had a thickly-coated tongue, a severe pain in the back of the head and post-cervical region; the skin was cold and covered with a clammy perspiration. On looking into the throat, both tonsils were covered with a thick white deposit, which I am compelled to recognise as diphtheritic. I immediately placed her upon the use of quinine in two grain doses every two hours, and directed wine-why to be given, with the utmost freedom. Her skin was rubbed to get up an active circulation, and at bedtime opium, was added to the quinine. I saw her yesterday morning, and the symptoms were decidedly moderated. Yesterday she was a good deal better; and to-day I found her very comfortable. The exudation has disappeared, leaving in its place a strawberry-roughness. The pulse is about 90, and has considerable force. No local treatment was employed.

Dr. METCALFE next made the following statement:—Since the beginning of the winter I have had ten cases of this disease, six of which I have seen in consultation. There have been seven cases in which the diphtheritic deposit affected the throat mainly, in the others the

Schneiderian membrane was the principal seat of the exudation. The first case was a child three years of age who was dying when I saw it; both tonsils and part of the velum were covered with the membrane. The patient died comatose. The next was the sister of this child, who presented the exudation on each tonsil, the palate, and in the nostrils; there was a good deal of constitutional excitement, with occasional delirium, present. This case terminated favorably after a fortnight's illness. The third case was a brother of the last, eight months old; the membrane was situated on the surface of the tonsils, and invaded a small extent of the palate. This child recovered after four weeks illness. The uncle, who was in the house, convalescent from measles, had a slight diphtheritic patch on the palate. The mother also had some trouble about the throat, her tonsils were much reddened, and the peculiar coating could be scraped from their surfaces without much difficulty. The constitutional disturbances were very trifling, and in two or three days she was entirely recovered. The next was a little girl four years old; I saw her on the next morning after the night she was attacked, when I found both tonsils almost completely covered with the membrane. The pulse ranged from 160 to 180. The breath was horribly fetid. The exudation in the course of the next day spread so as to cover the palate, and the grave symptoms increasing, the child died of apnoea two days after. The next was a child twelve years old, of a delicate constitution, who was taken on a Sunday morning, the membrane covering both tonsils and the edge of the soft palate. On Monday he was somewhat better; on Tuesday the fever subsided, and the membrane disappeared. That night the membrane reappeared, and extended into the nostrils; together with this there was attendant an immense tumefaction of one side of the neck. In consequence of this, there was a good deal of constitutional excitement, delirium, and difficulty of deglutition. The child, after making us believe for the greater part of four days that she was going to die, finally became convalescent. In this connexion Dr. M. exhibited a beautiful cast of membrane which had separated itself from the tonsils. Another case was in a young man, a member of the class at the University. He was taken sick on Saturday, and showed the patches in his throat the day following, when he experienced some difficulty in deglutition; had fever debility, and quickness of the pulse. These symptoms continued for three days; he suffering a great deal without being, as I thought, in positive danger. On the fifth day after the commencement of the attack, he was suddenly taken with a rigor, his skin was cold and covered with perspiration—respiration forty per minute. He could not lie down for a minute without having symptoms of suffocation. The gentleman who saw him with me was of the opinion that the case would terminate fatally very soon; the patient, however, recovered, and was able to return home on the Monday following. These are the only cases worthy of mention; of the rest, with but one exception there was very little constitutional excitement—some quickness of the pulse, pallor of the body, restlessness, pain in swallowing, and the occurrence of a well-marked membrane, with nasal defluction—and they all got well. I have not used quinine in any of the cases, but in its stead the mur. finct. ferri in twenty-drop doses every two hours to adults, decreasing the quantity according to the age of the patient. Besides this, I give plenty of beef-tea, milk-punch, and wine why. I have used the sol. of nit. silver locally, but can't say that I have derived any benefit from it. I have given the chlorate of potash as a gargle, but there again I failed in obtaining any good results. In conclusion, Dr. Metcalfe referred to a new remedy, the iod. of bromine, which had been brought to his notice by a physician in Long Island. It was used locally in the strength of fifteen drops to eight ounces of syrup, and was of great service in correcting the fetor of the breath. He (Dr. M.) had succeeded very well with the remedy, and advised the members to give it a trial.

Dr. WATSON referred to the case of a gentleman who, within the last six weeks, was attacked four different times with sudden fits of suffocation, which, after existing for a time, would be followed by the discharge of a plug from the bronchial tubes, when immediate relief would ensue. Dr. W. attended him in one of these attacks, and stated that the plug raised at that time was about two inches long, and about as thick around as the forefinger. The extremities of this mass were much softened while the centre was hard and tough. He thought it possible that the condition of things referred to might have more or less to do with the epidemic of diphtherite.

General Correspondence.

COLD AFFUSION TO THE CHEST IN ASPHYXIA FROM CHLOROFORM.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR: The report in your issue of the 11th instant, of a death in Bellevue Hospital, from inhalation of chloroform, forcibly reminds me of a similar case which occurred in my practice about a year since, and which came near resulting in a similar manner. I beg leave to state the circumstances briefly, for the benefit of your readers, many of whom, though daily in the use of this invaluable agent, have not always on hand, as was the case with myself, the facilities for generating electricity sufficient to be available in such an emergency.

As physician to the poor of this town I was requested to see a man who, in a fit of intoxication during the night, had made his way into the loft of a neighboring barn, and in the morning found himself suffering from a severe pain in the hip-joint, with much swelling, distortion of limb, inability to move, &c. I found the man to be a drunken vagrant of this region, about fifty years of age, full habit, short neck, short heavy frame, and still somewhat under the influence of his potations of the evening previous, but yet not sufficiently *anesthetized* to allow the slightest manipulation of his limb without great pain. The most superficial examination revealed an upward and backward dislocation of the head of the *femur*. The patient was placed on his back, and, with the help of six powerful men, reduction was attempted by "extension in the line of dislocation," but the obstinate resistance of muscles and the piteous cries of the patient induced me to resort to chloroform for its relaxing and anæsthetic effects.

After an interval of an hour to allow the *sobering process* to make a *man* of him, he was placed on the straw near a large open door, with head slightly raised, all strictures from tight clothing—that could possibly impede respiration—removed, and chloroform administered in the ordinary way on a linen pocket-handkerchief, so held as to allow a large admixture of atmospheric air. He had inhaled the vapor easily for the space of about five minutes with no unusual effects, and was pleasantly coming under its influence, and I was again about to take hold of his limb, when suddenly stertorous breathing set in, and respiration began to be very slow, and labored, with corresponding flagging in frequency and force of pulse and lividity of skin, all of which symptoms became aggravated every moment.

Under the circumstances, "Reed's Method of Reduction," was resorted to; and seizing the leg, I flexed it on the thigh, carried them across, closely hugging the thigh of the opposite side, and thence up over the abdomen, the thigh at the same time pressing the abdominal walls, until the axis of the limb was on a line with the body, and then with a forcible extension and external rotary motion of the whole limb the head of the bone slipped into its socket. I had hoped that this procedure, which, without the chloroform would have been next to impossible,

would at least have aroused the man to a sense of his peril, but respiration became less and less frequent, until he ceased to breathe entirely, the pulse at the wrist was lost, and auscultation over the precordia elicited no sound. He had become perfectly *asphyxiated*; his black and distorted features, and blood-shot eyes gave him the appearance of one just "delivered over to his friends" by the executioner. All thought him dead, and every man in the barn with one exception fled. This man I sent for a pail of water, and in his absence I stripped the patient entirely, and began a series of slappings on his chest and buttocks with the palms of both hands alternately, as only a surgeon under such circumstances could do. After some delay my assistant came with a *pint cup* of water. This was dashed on the man's bare chest, and express directions given for a pailful the next time. He had to hunt up a pail—go some distance to a neighboring pump, fill it, and bring it to the loft, all of which consumed precious time. After his return, I directed my assistant to pour successively cupful after cupful of cold water, from as high a point as he could reach, in a full stream directly on the centre of the patient's chest, which he did most faithfully, while I as faithfully kept up the slapping process with my hands. The resuscitation of the patient became more and more hopeless, until, after the lapse of three or four minutes, we had the satisfaction of witnessing a deep inspiration. By gently pressing the chest, the air was expelled, and in a few seconds another inspiration, followed by external pressure, the stream of cold water not being allowed to be suspended for an instant. We thus secured five or six deep inspirations per minute at first, until lividity of face began to clear up, the heart feebly to act, the pulse to be felt at the wrist, and the man took upon himself the responsibility of his own breathing. In less than half an hour he was conversing with us. I was led to resort to "the stream of cold water" for excitation of the respiratory muscles in this case from having some time before been equally successful with it in an adult nearly *moribund* from a large dose of crude opium taken for the purpose of self-destruction. In that case the process was kept up for over an hour, which alone excited respiration and kept the skin tolerably clear, until he was sufficiently restored to be walked about and flagellated "*à la mode*" the authorities.

H. C. MAY, M.D.

CORNING, NEW YORK, August, 1890.

SMALL-POX.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The total number of deaths in this city from small-pox (including 135 of varioloid) from Jan. 1st, 1850, to Jan. 1st, 1859, a period of nine years, is 4,096.

Greatest number in a year,	681
Least " "	101
Average " "	455

The comparative fatality of different months will be seen in the following statement:

1850–58, inclusive:—January, 505; February, 530; March, 474; April, 364; May, 406; June, 310; July, 204; August, 176; September, 152; October, 196; November, 302; December, 477. Total, 4,096.

No month within the time above-mentioned passed without a death. To the inquiry as to the reasons for the great prevalence of this malady, it may be well to reply in this connection, that *tenement houses* have been the chief centres of the contagion; and as the Health Department of the city is at present organized, no means exist of placing them, when so infected, under proper surveillance. In proof of the statement, we cite only one or two of many facts. The first is, that two, three, or more cases of confluent small-pox not unfrequently remain together in cramped, confined apartments, beyond possibility of their transfer to the appropriate hospital; and second, that the unretained bedding and clothing, upon the decease or con-

valescence of a patient from this disease, instead of being conveyed to the City Cemetery, and there burned, is set on fire in the street, or thrown out for the rag-pickers to collect, or cast into the vault of a rear yard, thence to exhale its poison.

With these and other most urgent reasons for a reform, it is impossible to understand why this terrible official neglect of a scourge, which the exercise of suitable means might confine in narrow limits, is tolerated. Unless the public mind is aroused upon the subject, the record of the next nine years will undoubtedly exhibit a similar result to that of the last. Even professional politicians must be converted. During the last three sessions of the Legislature they have exerted themselves to the utmost to prevent all legislation tending to improvement in this respect.

August 23.

B. B.

Medical News.

APPOINTMENTS.

NEW YORK HOSPITAL.—ROBERT F. WEIR, M.D., Curator, in place of ROBERT RAY, M.D., deceased.

BELLEVUE HOSPITAL.—CHARLES PHELPS, M.D., Curator, in place of J. W. S. GOULEY, M.D., resigned.

NURSERY AND CHILD'S HOSPITAL.—J. LEWIS SMITH, M.D., Curator.

LONG ISLAND COLLEGE HOSPITAL.—RUFUS KING BROWNE, M.D., Resident Surgeon, in place of Dr. CRANDALL, resigned.

Erratum.—In Dr. Jacobi's paper (page 114 of the last number, second column, eighth line from the bottom) for, "and descends slowly" read "and ascends slowly."

Correction.—Dr. Post's case of diphtheria, reported on page 68, died on the night of the day he saw her in consultation, having had the disease for several days previously. The case was an unusually severe one.

EUGENE A. GROUX, whose fissure of the sternum exposed the actions of the heart, and on account of which he has been an object of great interest among physicians, received the honorary degree of M. D. at the recent commencement of Dartmouth College.

BOYLSTON MEDICAL PRIZE QUESTIONS.—At the annual meeting of the Committee on Wednesday, Aug. 1st, 1866, a premium of ninety dollars, or a gold medal of that value, was awarded to JOHN BELL, M. D., of New York, for the best dissertation on the question:—*How far does the Microscope assist us in Surgical Diagnosis?* The other premium of the same value was awarded to DAVID W. CHEEVER, M. D., of Boston, for the best dissertation on the question:—*The Value and the Fallacy of Statistics in the Observation of Disease?* The following questions are proposed for 1861:—1. *Excision of Joints*; 2. *Diagnosis and Treatment of Chronic Pleurisy*. Dissertations on these subjects must be transmitted, post paid, to Edward Reynolds, M. D., on or before the First Wednesday of April, 1861. The following are the questions proposed for 1862:—1. *How far does the Microscope assist us in Surgical Diagnosis?* 2. *On Nausea and Vomiting, as symptoms, under what circumstances do they occur, and what indications do they afford as to the seat and character of disease?* Dissertations on these subjects must be transmitted as above, on or before the First Wednesday in April, 1862. The author of the best dissertation considered worthy of a Prize, on either of the subjects for 1861 and for 1862, will be entitled to a premium of Sixty Dollars, or a Gold Medal of that value, at his option.

A FATAL PASSION FOR HANGING.—A lady, inhabiting a pretty little house near Paris, possessed of ample means, of a charitable disposition, and very fond of reading, writing,

and purchasing books, was found hanging the other day. She left a document of an extraordinary character, in which she stated that, no sooner had she determined upon hanging herself than she executed the deed. She always had a remarkable predilection for people who had been hanged, and she left in her library a manuscript in which she had inserted accounts of all celebrated persons who had been hanged; and in another MS. all the proverbs and sayings concerning hanging were collected. "Hitherto, however, the idea of hanging myself had not entered my head, but becoming *enraged*, and having lost my taste for everything, even for my favorite pastime of reading, the idea of suspension, has occurred to me, and as soon as I have completed this note, I shall put it into execution. I desire that the rope I employ may be divided between my two neighbors, and that all my property be realised:—First of all, a pension of 40*l.* must be reserved for my old servant, and then all that remains must be so disposed of as to produce ten equal portions, which are to be distributed to the first ten poor families, one of the members of which may happen to hang himself, dating from the day of my death. This is my sole will and testament."—*Med. Times and Gaz.*

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 11th day of August to the 18th day of August, 1866.

Deaths.—Men, 34; women, 77; boys, 167; girls, 144—total, 472. Adults, 161; youths, 30; children, 291; males, 251; females, 231; colored, 4. Infants under two years of age, 235. Among the causes of death we notice:—cholera-infantum, 31; infantile convulsions, 31; croup, 6; diarrhoea, 19; dysentery, 11; scarlet fever, 19; typhus and typhoid fevers, 5; inflammation of brain, 17; of lungs, 11; of stomach, 10; measles, 6; small-pox, 3; sun-stroke, 3; consumption, 55; dropsy of head, 8; infantile marasmus, 34. Classification: brain and nervous system, 31; respiratory, 85; digestive, 133.

The number of deaths compared with the corresponding weeks of 1865 and 1866, and of last week, was as follows:—

Week ending August 14, 1866	633	Decrease	165
" " August 20, 1866	710	"	283
" " August 11, 1866	654	"	153

JULY. and Aug.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General di- rection of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	"	"	"	"	"			
13th.	29.95	.06	75	64	80	7	19	SE.	7	
14th.	29.90	.15	73	73	83	4	6	SE.	9	
15th.	29.90	.30	63	63	65	8	5	NE.	10	
16th.	30.04	.06	65	58	78	8	13	NE.	1	
17th.	30.07	.04	68	58	77	12	16	NE.	.01	
18th.	30.00	.11	73	66	80	8	11	SE.	0	
19th.	29.87	.14	73	69	84	7	10	SE.	2	.3

REMARKS ON THE WEATHER.—13th. Sultry; wind light. 14th. Sultry; variable wind and sky; gale with heavy rain, P.M. 15th. Storm, A.M., moderate, P.M.; the wind during this storm blew for almost equal periods from the SE. NE. and NW., with a high range of barometer. 16th. Fine; wind light, A.M., fresh, P.M. 17th and 18th. Fine, with very light winds. 18th. Sultry; wind light, A.M.; rain with thunder and lightning from 5 to 6 P.M.; evening cloudy.

MEDICAL DIARY OF THE WEEK.

Monday, Aug. 27.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Taylor, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Aug. 28.	{ BELLEVUE, Medicine, Dr. Elliot, half-past 1 P.M. CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
Wednesday, Aug. 29.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Griscom, half-past 1 P.M. BELLEVUE, Surgery, Dr. Meir, half-past 1 P.M. ACADEMY MEDICINE, 8 P.M.
Thursday, Aug. 30.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Greene, 12 M.
Friday, Aug. 31.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Sept. 1.	{ BELLEVUE, Surgery, Dr. Mott, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

Original Lectures.

A CASE OF PNEUMONIA ASSOCIATED WITH PERICARDITIS.

REMARKS ON SUSTAINING TREATMENT.

A CLINICAL LECTURE,

DELIVERED AT THE LONG ISLAND COLLEGE HOSPITAL.

BY

AUSTIN FLINT, M.D.,

PROFESSOR OF THEORY AND PRACTICE OF MEDICINE.

GENTLEMEN:—I propose to devote the present lecture to a recapitulation of the prominent features in an interesting hospital case which has been for some time under our observation, and to some remarks on the importance of sustaining measures of treatment, as exemplified in the history of this case. The patient, Stephen McNamara, an Irishman, a plasterer by occupation, was admitted into the hospital May 12th. He is twenty-eight years of age, and of intemperate habits. His illness commenced thirteen days before his admission. He stated that he had had a slight cough much of the time during the past winter, but was otherwise well up to the date of the present attack. He has been in the habit of drinking freely for the last twelve years, and at times to great excess. He was attacked with acute pain in the left side of the chest, near the nipple, but it did not prevent him from keeping about. The next day he came to the Dispensary, and was bled freely. He was so far relieved that he worked the following day from ten A.M. till night. During the night the pain in the left side returned, but he worked the next day till noon, when he finished a job in which he was engaged. The following night the pain was severe, and accompanied by considerable difficulty of breathing. He kept the bed after this, &c. for the nine days preceding his admission into hospital. He was visited for several days before his admission by a member of the class, who prescribed chiefly anodyne remedies. On his admission the physical signs showed the existence of pneumonia, affecting the lower lobe of the left lung. Bronchial respiration, bronchophony, and the bronchial whisper, with marked dullness on percussion, extended over the portion of the left side corresponding to the situation of this lobe. A faint cardiac friction sound was heard in the præcordial region. He was free from pain, excepting on a deep inspiration. The cough was not frequent, and the expectoration small but rusty. The pulse was one hundred, small and feeble; the respirations twenty-eight. There was moderate effusion within the pericardial sac, shown by marked dullness on percussion, within a pyramidal space extending upwards nearly to the sternal notch. Laterally, the dullness extended half an inch without the left nipple, and an inch beyond the right margin of the sternum. The friction sound was double. The apex beat was felt very feebly in the fourth intercostal space, just below the nipple. The heart sounds were distinct, but the element of impulsion in the first sound was wanting. There was no endocardial murmur.

It is unnecessary for me to say that these signs constituted evidence of pneumonia with solidification of the lower lobe of the left lung, complicated with pericarditis. The treatment was, a quarter of a grain of sulphate of morphia every four or six hours; brandy, two ounces every three or four hours, and sustaining diet. On May 14th, as appears from the hospital record, the condition of the patient was improved. Examination of the præcordia showed diminution of the pericardial effusion; the solidification of the lung continued the same. May 17th.—The improvement had been progressive, the pericardial effusion was gone. The

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friction sound had disappeared. The physical signs of solidification over the affected lobe, however, continued. The pulse was eighty; the respirations twenty-four. The treatment had been continued, save that whiskey had been substituted for brandy. His appetite was good, and full diet was allowed. May 21.—The patient was able to sit up. He was distinctly convalescent. Nevertheless, the signs of solidification over the affected lobe were still present, although less marked. The treatment was, the sulphate of morphia, sufficient to quiet cough; whiskey, two ounces three times a day, and full diet. May 29.—The patient presented œdema of the face and lower limbs. The pulse was eighty-eight; the respirations twenty-four. The urine was not albuminous. There was no cardiac murmur, endocardial or exocardial. The solidification of the affected lobe had diminished. The appetite was good. The muriate of ammonia, a drachm, with the same quantity of extract of liquorice, was directed to be taken daily in solution. The whiskey and full diet were continued. May 31.—The second sound of the heart was reduplicated at the base of the heart over the sternum, and without the left margin of the sternum. No reduplication of the first sound discoverable anywhere. June 1.—The patient reported better, and his aspect has improved. The reduplication of the second sound of the heart was heard occasionally, not constantly, as on the day previous. The treatment was continued.

At the present time, June 11, the condition of the patient is much improved. He is able to be up and out of doors. The œdema has not entirely disappeared, but is much diminished. The pulmonary symptoms are slight. Resolution of the affected lobe is nearly complete. There is heaving of the præcordia, but the heart is not enlarged, and I do not discover any murmur. The reduplication of the second sound of the heart is no longer perceived, and no murmur is discoverable.

The patient is now taking the citrate of iron and quinia. The whiskey was discontinued some days ago. He has full diet, and is allowed to go out of doors freely.*

The history of this case, gentlemen, shows that the primary affection was the pneumonia. The patient, as is not unusual, struggled against the disease, and kept at his work as long as possible. The temporary relief following the bleeding is worthy of note, but it is also to be noted, that this measure did not arrest the disease, nor prevent the development of pericarditis. The latter affection was undoubtedly consecutive to the pneumonia, but we cannot fix the precise date of its occurrence. The two affections are not very unfrequently associated, and pneumonia complicated with pericarditis is always to be considered as involving danger. Moreover, in this case the patient was a bad subject for a serious disease. He had drunk freely for many years, and was addicted to drunkenness. Finally, as he was progressing favorably, general dropsy occurred. The occurrence of this event, together with the habits of the patient, his pallid aspect, and the fact that pericarditis had been developed, pointed to degenerative disease of the kidneys; but on repeated examinations of the urine it was found to contain no albumen. The dropsy has now nearly disappeared, and from the present condition of the patient there is every reason to expect that he will soon be fit to leave the hospital.

I have already directed your attention sufficiently to the physical signs illustrated in this case, and their diagnostic significance. All of you have had the opportunity of verifying these signs for yourselves at the bedside. I have recapitulated them merely to refresh your memories. I wish more especially, on this occasion, to bring before your minds prominently the treatment pursued in the case, and to avail myself of the opportunity to make some general remarks on the importance of sustaining measures in the management of various affections. In the first place, let me define the meaning of sustaining treatment. We mean to embrace

* The patient, a few days afterwards, obtained permission to leave the hospital for a day, in order to attend to some business, and he did not return.

by this term measures which are said, metaphorically, in the absence of precise knowledge of their *modus operandi*, to support the vital forces; in other words, to prevent a dangerous degree of exhaustion of the powers of life. Now, what are the means by which we may hope to maintain the strength of the system when the tendency of disease is to destroy by overcoming the vital resistance of the organism? Without discussion of the rationale, we know practically, that these means consist of stimulants and nutriment. The stimulants consist of the ethers, the essential oils, and more especially the alcoholic preparations, wine or spirits, distinguished as diffusible stimulants. These, as it were, feed the lamp of life, when the flame flickers and is in danger of being extinguished. But to render the support more effectual, nutriment must be introduced into the system. And for this object, the nutriment should be digestible, rich in nutritious principles, concentrated, *i.e.* containing much matter of nourishment in a small bulk, and in a form to be easily introduced. The animal essences, properly prepared, combine these several conditions; and in order to secure the necessary variety of alimentary substances, milk should be added. The sustaining treatment, as you have observed it in operation in the case which has just been reviewed, and in other cases during the session, involves the administration of some form of spirit, at shorter or longer intervals, according to the urgency of the indication for the treatment, together with a diet of essence of beef or strong chicken broth, alternating with either milk, or what is known with us commonly as milk porridge, and given in small quantities at a time, often repeated. I do not stop to dwell upon details connected with the carrying out of this treatment. These have been considered in other connexions, and are doubtless familiar to all of you.

To revert to the case which I have introduced as a text to these remarks, our patient entered the hospital with pneumonia complicated with acute pericarditis. The pneumonia had been of several days' standing. The inflammation was confined to one lobe, and, thus limited, the affection alone would not have been attended with great danger. But the pericarditis was probably recent, and its coexistence with the pneumonia undoubtedly placed the patient in considerable danger. Now, then, suppose we had reasoned as follows: It is important, in order to save the life of this patient, to direct our treatment to the inflammation of the pericardium. We must, if possible, subdue or control this inflammation. With this view we will bring to bear upon it, promptly and efficiently, antiphlogistic measures, as they have been called—*viz.* general or local bleedings, purgatives, mercurialization, vesication, and low diet. Had we followed out such a plan of treatment, I do not hesitate to say that I believe we should not only have failed to save the life of our patient, but our measures would have aided the destructive tendency of the associated diseases. And yet I am not prepared to deny that, under certain circumstances, such a plan of treatment might be indicated. It was not indicated, but, on the other hand, contra-indicated in this case. Why? Because the measures which the plan of treatment embraces were in direct conflict with another and a more important indication, *viz.* to support the power of the system. The sustaining treatment was called for because the source of immediate danger was not in the local lesions to which the pericarditis might give rise, but in the inability of the system to resist the general effects of the two diseases. The tendency to death was by asthenia or exhaustion; if this tendency could be overcome, or, in other words, the patient could be kept alive, the double inflammation, *viz.* the pneumonia and pericarditis, might be expected to run their courses respectively, and the affected organs recover without serious damage. Such was the fact. Sustaining measures were alone employed. The patient was placed on the use of alcoholic stimulants and concentrated nourishment. Opium was given in order to render the system more tolerant of the local affections, or, in other words, to obviate in a measure the sympathetic disturbance arising from them. In

short, the *patient* was treated rather than the diseases, and we have had the satisfaction to see him pass with safety through a combination of affections involving not a little danger to life.

The leading practical principle exemplified in the management of this case has a far wider application than to the combined diseases with which this patient was affected. Its application, in fact, extends to all diseases of whatever nature and wherever situated. We may assert as an axiom in the practice of medicine that, whenever any disease tends to destroy life by asthenia or exhaustion, the sustaining treatment is indicated, and in proportion to this tendency is it of paramount importance to employ with efficiency measures to support the powers of life. This principle takes precedence of all the therapeutical indications pertaining to particular diseases. Experience and reasoning may show that such or such diseases are often influenced favorably by such or such remedies; but whenever there is danger to life in consequence of defective power in the system to resist disease, then the means of supporting and increasing this power of resistance supersedes all others, and measures having reference to the processes which constitute the disease are contra-indicated if they conflict with the sustaining treatment. We have remarkable examples of the power of sustaining measures in certain cases of the fevers which have a self-limited career. A patient with typhus may present symptoms which would lead us to look for death hourly, and if by means of alcohol and nutriment given without stint, and almost without limit, we can succeed in preventing the flame of life from going out for one or two days, the danger is passed, the disease has run its course, and the patient enters at once upon convalescence. The same holds good measurably with most acute inflammations. These may be said usually to have a self-limited course. Doubtless it is of the first importance, if possible, to arrest them; and if this be not practicable, to lessen the intensity of the inflammatory processes, to prevent extension of the inflammation, to abridge its duration, and promote the most favorable mode of termination. How far all these important ends of treatment are within the resources of therapeutics I will not stop to consider. But of vastly greater importance is it, whenever an acute inflammation of any organ involves imminent danger, not from its local effects on the inflamed organ, but from the inability of the system to bear up under the disease, to maintain and strengthen the vital powers. In most fatal cases of acute inflammation death occurs not because the inflamed parts are so far damaged that recovery is impossible, but because the powers of life fail before the processes of restoration are completed. Hence, we can understand why some patients recover from an affection which, without being more intense or extensive, destroys other patients—the latter have less ability to resist disease.

In the management of acute affections of all description, the physician should direct his attention, not to the disease alone, but to the patient. The saying of Chomel is so significant and important that it cannot be too often repeated: "We are never to treat diseases, but patients affected with disease." It must be confessed that the fundamental principle involved in this saying has not been properly appreciated by medical practitioners. The attention has been too exclusively directed to local morbid processes, and the general condition has not been sufficiently considered. Certain therapeutical measures might perhaps prove successful if the patient does not die! In treating a local disease, it has been too much the habit to disconnect the affected organ from the rest of the organism. Often the true source of the disease is elsewhere than in the part where the manifestations appear, and the danger is not so much from what the part will suffer as from the general condition. The measures which are directed to the local affection are often antagonistical to those which the general condition claims. In the management of an acute inflammation of an important organ we have, on the one hand, the various depressing agencies which enter into the so-called

antiphlogistic treatment; on the other hand, we have the sustaining measures. The two can hardly be combined, i.e. both pursued at the same time, but they may both be appropriate in the same case, the one preceding the other. And therefore it often becomes a question of momentous import—Shall the measures directed to the local affection be adopted or continued, or shall we direct our efforts to support the powers of the system? Whenever this question presents itself in practice, I have adopted a method of meeting it which seems to me sufficiently reliable for all practical purposes. I meet it by another question which we can generally answer without difficulty, viz. If the disease terminate fatally will it destroy by asthenia? Whenever present symptoms and the experience of analogous cases afford ground for fear that the immediate danger is from the want of power in the system to resist the disease, there can hardly be room for doubt as to the indication for sustaining measures. But the judicious physician will not always wait for this question to be presented; he will foresee that it must arise, and will forestall the circumstances which make the question one of momentous import.

The subject, Gentlemen, of the sustaining treatment in the management of diseases generally, is one of the most important in practical medicine. It opens up a wide field of discussion. In these few remarks I have only touched on some of the many points which a full consideration of the subject would embrace. In conclusion, it follows from the considerations which have been presented, that it is an absurdity to claim for diseases fixed or routine methods of treatment. The same disease, let it be a pneumonia if you please, may call for different and opposite measures. In one patient an antiphlogistic plan of treatment may be appropriate; in another patient this plan of treatment would be destructive, and the life of the patient depends on a vigorous sustaining treatment. There are few diseases, if any, the management of which we are able to formularize. In general terms, the success with which diseases are managed depends on the discrimination with which the practitioner brings the resources of our art to bear on the local processes of the disease, and on the general condition of the system.

The history of the case which prefaced these remarks includes a somewhat rare and curious event, the pathological significance of which is not yet fully understood. I refer to a reduplication of the second sound of the heart. One or both of the heart-sounds may be reduplicated; the latter, however, is exceedingly rare, and when the reduplication is confined to one it is generally the second sound. I must postpone the subject of reduplicated heart-sounds for some other occasion. I will briefly say, that the most rational explanation is that which attributes the occurrence to a want of perfect synchronism in the contractions of the two ventricles. It would be inferred, at first, that the first or systolic sound should be oftener reduplicated than the second; but we can understand why it is not when we consider the elements which enter into the first sound, and the fact that the valvular element of the first sound is weaker than the second sound. If you apply the stethoscope over the apex of the heart, the first sound is usually much more intense than the second; but if you carry the instrument away from the heart, the second sound becomes more intense, and is heard at points removed from the heart where the first sound is lost. The reason of this is, it is the element of impulsion which renders the first sound more intense over the apex, and the sound due to this element is not transmitted beyond the heart. The first sound, as heard beyond the heart, is due exclusively to the action of the auriculo-ventricular valves. Now the sound produced by these valves, notwithstanding their greater size, is less intense than the second sound emanating from the semilunar valves. This is a fact of observation, but it is also susceptible of explanation. Now, when there is a want of synchronism in the contractions of the ventricles, the element of impulsion of the first sound is either weakened or lost; the valvular element of this sound is alone redup-

plicated, and owing to the relative weakness of the valvular sound the reduplication is rarely perceived, when the reduplication of the second sound is sufficiently appreciable. The reduplication of the second sound was perceived in this case at the base of the heart, over the sternum, and without the left margin of the sternum. This is the situation where the reduplication of the second sound is to be looked for, in consequence of the proximity to the semilunar valves.

Still another event in the history of this case would call for remarks if time permitted, viz. the general dropsy. The consideration of this subject I must also defer.

Original Communications.

A CASE OF LITHOTOMY PERFORMED WITH THE LITHOTOME CACHÊ.

By DAVID P. SMITH, M.D.,

OF SPRINGFIELD, MASS.

MARCH 27, 1860.—Saw Mr. F., of South Wilbraham, Mass. Found him suffering from all the rational symptoms of stone, and in addition, a high febrile state. There was much tenderness on pressure just above the pubes, and fully one-half that passed from the bladder was adhesive mucus, pus, and blood. On introducing a small catheter plugged, it was so firmly grasped, that any attempts to ascertain the presence of a stone, in his then bad state, were deemed inadvisable. I advised four to six grains of quinine daily, with enough morphine to procure rest, alkalies in moderation, and the daily use of an injection into the bladder of a solution of nitrate of silver in water, with a little morphine. The strength of the solution was in the beginning $\frac{1}{4}$ gr. of argent. nitrat. to $\frac{3}{4}$ j. of water, with $\frac{1}{4}$ to $\frac{1}{2}$ gr. of morphine sulph. At this consultation fears were expressed that the plan I advised would prove nugatory, and that he would speedily die unless immediately relieved from the irritation. With all deference to the opinion of the gentlemen present in consultation, I could not feel that it was proper to operate in the state he was then in, and consequently it was agreed to try the above plan. About three weeks after this I saw him again. He was decidedly improved, urine nearly clear, and he was able to sit up. Since my first visit, however, he had been very ill for a few days with high febrile action, pulse one hundred and ten, tongue thickly coated, urine scanty and white, nausea and vomiting, and abdomen generally tender on pressure. Dr. E. E. Hamilton, of Somers, Ct., who was in attendance, stated that this febrile state resembled an epidemic then prevailing in that vicinity. His bladder was now being injected daily with—R. Argenti nitrat. grs. iij.; aquæ $\frac{3}{4}$ iv.; morphine sulph. gr. j. By introducing a number four catheter, injecting the bladder through it, and then using it plugged, as a sound, I was soon enabled to find the stone, which appeared to be very hard and small. I directed the continuance of the injection until the patient submitted to the operation.

I decided to operate about one week after this. The urine was at this time perfectly clear, and free from sediment. When all the preparations had been made for the operation, it was with great difficulty that the existence of the stone could be verified. Chloroform was administered, but acted very unfavorably, placing the life of the patient in great jeopardy. He was, as soon as possible, brought out of this alarming state, by holding forwards the tongue, and inducing artificial respiration, after the method of Marshall Hall. The stone could not be plainly felt until a large quantity of warm water was thrown into the bladder, which being forcibly expelled, brought the stone down, when it could be felt by Dupuytren's staff. Making a small

external incision, beginning three-fourths of an inch in front of anus, I struck the groove of the staff through a very deep perineum. Laying aside the knife, I then slid along the staff *Frère Come's* single lithotome *caché*. The blade of this was quite blunt, and arranged so as to cut two-eighths of an inch when sprung. Withdrawing the staff, and expanding the blade, I very slowly drew out the lithotome, cutting downwards and outwards. Introducing my fore-finger into the wound, I found that I could just reach the incision into the bladder, and touch the stone. A long bullet forceps enabled me to slowly extract the stone through the very limited wound. There was little hemorrhage, and the patient, after having a tube introduced through the wound into the bladder, was soon placed in bed with every prospect of a speedy recovery. These anticipations were happily verified. He had not a bad symptom. After the twelfth day the urine all flowed by the urethra, and soon after that he was enabled to leave his bed and engage in his ordinary pursuits.

I was kindly and ably assisted by Dr. Otis, of this city, and Drs. E. E. Hamilton and Son, of Somers, Ct., who had the whole care of the patient, both before and after the operation. Dr. Otis analysed the external lamina, and found it to consist of oxalate of lime. Weight of the concretion eighty-one grains.

Remarks.—Considering the size and dilatability of the urethra, it will be seen that the blunted lithotome, slowly drawn out, could have made but a very limited incision. Is it not with reason that I applaud this method of operating, and attribute to it the man's speedy recovery? The objections urged against this form of lithotome appear to me, when it is used in this way, to fall to the ground, and the advantages resulting from its use are certainly decided. The great alleviation of all the bad symptoms, which was so clearly attributable to the use of the injection, appears to me to merit the attention of the profession.

REPORT OF SURGICAL CASES.

By D. B. HILL, M. D.,

OF PALO ALTO, MISSISSIPPI.

DEPRESSED FRACTURE OF THE SKULL, WITHOUT THE USUAL SYMPTOMS OF COMPRESSION OF THE BRAIN.

The patient was a tall, well formed, active, sensible negro man; about thirty years of age; a field hand, belonging to Mr. C. B. M—y. He had a nervous excitable temperament, and was generally hard to control. On the 24th of April, 1856, in attempting to resist the authority of his overseer, he was struck by the latter on the side of the head with a common weeding hoe, which knocked him senseless to the ground. My father (Dr. D. B. Hill) was called immediately to see him, and arrived in a half hour after the occurrence. He found the negro in a semi-conscious condition, with cold extremities and weak pulse. Gentle frictions and mild stimulants were employed, and in a few hours he entirely regained his senses, and his constitution fully reacted. On the left side of his head a wound was observed, which, upon examination, was found to be a compound comminuted fracture of the skull, commencing about an inch from the junction of the coronal and sagittal sutures, and extending obliquely for an inch and a half in the direction of the mastoid process of the temporal bone. The wound of the scalp was slightly enlarged by incision; several small pieces of the outer plate of the skull were extracted, and the opening thoroughly examined by means of the finger and metallic probe. My father being inclined to the opinion that the internal plate was depressed, but not entirely certain of it, requested a consultation. Dr. J. P. Deans was sent for. He came, and after examining the wound, thought that the internal plate was intact, and that the character of the symptoms did not justify an operation. They both therefore agreed to dress the wound in

the usual manner, and treat the case upon general principles. The wound healed very kindly, and in three or four weeks he resumed his place in the field, feeling entirely well. He made a full hand during the summer and fall, feeling quite well all the time, with the exception of an occasional headache, referred chiefly to the side of the head that had been injured; for this he sometimes lay up a day. His health continued generally good, until the following March, nearly a year from the time he received the blow. About the 15th of this month—March (I don't remember the exact date, as these notes are made entirely from memory), on a cold, damp day, he was standing by a log fire in the field, with other hands of the plantation, warming, and playing pranks on them. He had a switch in his hand, striking at a girl across the fire, and started around after her, rushing hurriedly between the other negroes, when he suddenly fell to the ground and expired in a few seconds.

My father and myself were called to make an autopsy, twelve hours after death. Rigor mortis well marked. In endeavoring to remove the calvarium, an obstruction was felt in the region of the old wound on the scalp. This was soon overcome by forcible traction and the use of the scalpel, detaching an adhesion that existed between the dura mater and the inner surface of the skull, directly opposite the cicatrix on the outside. There was a conical projection of the inner table of the skull, upon the brain, directly corresponding to the fractured outer table. Its vertical diameter was about one-fourth of an inch, that of its base about an inch. Three fissures radiated from its apex to its base, about equidistant from each other; one of them extending nearly around to the end of another, at the base of the cone. On the brain there was a cup-shaped cavity corresponding to the projecting bone; around this the meninges were intensely congested, which became less marked two or three inches from the centre of the cavity. The brain substance presented the characteristic red puncta on being sliced, which was more observable immediately beneath the point of compression. There was no extravasation of blood, nor much effusion in any of the cavities of the brain.

Trephining at the time this negro received the injury, evidently would have prolonged his days. But would it have been warranted without the presence of the usually attending symptoms of compression of the brain? This has been a subject of discussion amongst men of the greatest minds and largest experiences in our profession, and I leave it for them to decide.

STRANGULATED VENTRAL HERNIA.

A negro woman belonging to Mr. S—d (a planter of this vicinity), aged 40, of medium size, stout, well built, and the mother of fifteen children, was attacked on the morning of the 25th of June last, with violent pains in the epigastrium, nausea, vomiting, etc. I was called to see her in a few hours after she was taken ill, when she seemed to be in great suffering—screaming loudly, writhing and twisting in bed, and pressing her abdomen with her hands. She described the pains as being very similar to those of parturition, but far more excruciating, coming on at regular intervals of four or five minutes, and lasting about the same length of time. She stated to me that she had a large knot on her belly, and that she was not pregnant. On examining the abdomen I found a large tumor, situated about three inches above the umbilicus, in the median line, near the size of a cocoanut; it was rather hard and rigid, but very movable under the integument, in the absence of a pain. The tumor was quite tender to the touch, and manipulating it excited vomiting. After a close examination I pronounced it a hernial protrusion; had the part well fomented with warm cloths, the knees drawn up, and the head elevated, to relax the abdominal walls. As she was already very much nauseated, I then made an effort at reduction, which caused her great pain, and failed of success; evidently from the spasmodic action in the tumor and

surrounding structures, together with the marked disproportion between the protruding mass and the aperture through which it had passed. I immediately had tobacco-leaves, steeped in warm water, applied over the whole abdomen, and a large tobacco-poultice placed upon the tumor; also gave ant. et pot. tart. gr. ii., morph. sulph. gr. ss. She was soon excessively nauseated, and very much relaxed, but the pains continued with the same severity. In the course of an hour the tumor became soft and pliable, the abdominal walls relaxed and flaccid, when I again applied the taxis with complete success. The protruding intestine gradually returned into the cavity of the abdomen, by gentle and persistent pressure being applied, first to the part of the tumor next to the opening through which it had passed, and successively to the whole. The fluid and gaseous contents of the intestine escaped into the abdomen, as the gut was passing, with an audible noise. A compress and bandage was applied, and she soon fell into a gentle sleep, entirely free from pain, and is now at work in the field.

ON THE ADVANTAGES OF ELASTIC EXTENSION IN MORBUS COXARIUS.

By H. G. DAVIS, M.D.

In a paper read before the Academy of Medicine, the following case was given as illustrating the relief afforded by elastic extension in morbus coxarius.

April 18, 1860.—Visited for the first time the daughter of E. A. N., Gallatin Place, Brooklyn. She has suffered from morbus coxarius for four years; has had repeated attacks of inflammation of the joint, each attack leaving her limb in a worse condition than the preceding, was confined to the bed for some time last summer, the general health being much impaired by the confinement and suffering. At the time of my visit, had been upon the bed for six weeks and had not been moved. The pain and suffering during this time had been excessive, causing her to scream for hours, and every attempt at change of position giving rise to pains that were agonizing. The limb was flexed at right angles with the body and inverted so as to rest upon the pubes; the other limb was also flexed close to the body, so as to permit the knee of that affected to lie below it upon the bed, while the lower limb was held against the nates by the hand of the patient, to prevent motion by the involuntary action of the muscles. The sensibilities were exalted; the body emaciated; appetite gone, hectic fever and night sweats; the pains paroxysmal during the night. This condition of the patient rendered the commencement of the treatment more difficult than any case I had encountered; yet by making steady extension upon the femur, I was enabled to bring the lower limb in a line with it, and raise the whole from the bed, sufficiently to permit the application of the adhesive straps.

These were affixed without much pain, extension being kept up by the hand of an assistant. The movement of the limb consequent upon applying the roller, gave extreme pain. The body was now placed at right angles with the bed, a weight of three pounds, by means of a cord and pulley, was affixed to the limb for extension, and an anodyne directed. After twelve o'clock the patient rested better than for some weeks. In the morning, upon moving the body accidentally, she exclaimed to her mother that "she could now move her limb without hurting her." The symptoms and suffering continued to mitigate, and on May 4th, my record is:—She is lying straight upon the bed with a slight contraction of the pelvis upon the side of the diseased limb, the position of the limb and foot nearly correct, the sensibility of joint very slight. The splint was applied and the patient rode out; she continued to improve, and the limb now admits of free motion in every direction; her general health has become good, and she has gained flesh and strength rapidly. From present appearances (August) she

will recover with a good joint. This result of the treatment (so far as the relief to the suffering) has been uniform, never having failed in a single instance, and this history is given for the purpose of illustrating the effect of continued extension in this disease; and when I speak of extension I do not apply the term to confining a limb in a given position, but to that process by which the soft parts are kept continually upon the stretch, whether by means of a weight or some elastic material, the result of which process upon muscular fibre, is to weary it and thus put it at rest. It is in this respect that the plan of treatment differs from all that has been heretofore adopted. Extension, by the older writers, meant simply bringing the limb into a certain position and thus securing it.

This principle of elastic extension as applied to the treatment of disease, originated (so far as my knowledge extends) with me, many years back, and was first applied in overcoming the deformity of lateral curvature of the spine, then in Potts's disease, club feet, morbus coxarius; finally it is being used in the treatment of diseases of all the joints. It is equally applicable in cases of fracture requiring extension.

Reports of Hospitals.

BELLEVUE HOSPITAL.

POISONING BY OPIUM SUCCESSFULLY TREATED BY APPLICATIONS OF ICE TO THE SPINE, AND ELECTRICITY.

[Reported by ALEXANDER HADDEN, M.D., House Physician.]

MARY McD—, aged 28, native of Ireland, domestic, admitted to Bellevue Hospital August 9, 1860, at one o'clock P. M., from one of the police stations; reported to have taken a poisonous dose of laudanum about an hour and a half previously. On admission she was profoundly narcotised; face and lips swollen and livid; respiration slow and stertorous; a strong odor of laudanum noticeable; pupils very much contracted and insensible to light; pulse, one hundred per minute; extremities cold and clammy.

Treatment.—The contents of the stomach were evacuated by means of the pump, and a strong infusion of coffee injected. The galvanic battery was then used, but with little apparent success; she seemed to be simpering, notwithstanding, into a more profound sleep; respiration growing less and less frequent. Ice was thereupon applied to the head and along the spine. This in a few moments seemed so far to relieve her narcotism, that a slight current from the battery would completely arouse her, as would also any of the ordinary means. At two o'clock P. M. the ice was withdrawn, and she was allowed to remain undisturbed to ascertain her real condition. Her respirations sank in a very short time from twelve to one and a half per minute; pulse one hundred and twenty; other symptoms alarmingly urgent. The poles of the battery were applied to her while in this condition, but as before, seemed to give her not the slightest uneasiness. The ice being reapplied she instantly aroused, and if the current was persistently kept up, she grew in a few minutes very restless, and resorted to violent measures to prevent it. This succeeded so perfectly, that she could be induced at any time to take nourishment, and on several occasions rose up in bed, and took large draughts of coffee voluntarily. At different times, between the hours of two and five o'clock P. M., the means for keeping her aroused were withdrawn, to discover when they might safely be withheld, but at no time did her respiration exceed two per minute. At six o'clock P. M. respiration had increased to five and a half per minute, and at seven o'clock to six per minute. She was then allowed to sleep, being closely watched; she slept for half an hour, and awoke. At eight o'clock respirations

were ten per minute; pulse one hundred and twenty; and weak. Ordered an enema, brandy, $\frac{3}{4}$ i.; beef tea, $\frac{3}{4}$ ij. to be repeated at ten o'clock. At eleven o'clock respirations were sixteen; ordered enema, repeated every two hours during the night, in consequence of the irritability of her stomach. August 10th, A.M., respiration natural; pulse one hundred, and weak; stomach still irritable; ordered the enema of beef tea, $\frac{3}{4}$ ij., every three hours during the day. At six P.M. stomach retained beef tea. August 11th, quite recovered. August 13th, discharged cured.

UTERINE HEMORRHAGE CONTROLLED BY AN INJECTION OF A SOLUTION OF PERNITRATE OF IRON.

[Reported by ALEX. HADDEN, M.D., House Physician.]

MARY S—, æt. 28, was admitted to Bellevue Hospital, July 31st, 1860, suffering from uterine hemorrhage. She had been delivered seven days previously of a stillborn child six months old, and up to the morning of her admission had flooded profusely. On examination, the discharge from the vagina was found to be dark colored and offensive; the uterus was considerably enlarged, and sensitive to pressure when felt through the abdominal walls; the countenance was blanched, and the patient was very much reduced in strength. The usual precautions were taken to prevent occurrence of the hemorrhage, but it returned notwithstanding. Aug. 2.—Examination *per vaginam* was made, and the os uteri was found dilated to the size of a quarter of a dollar, with a portion of the placenta presenting. The vagina was at once plugged and tr. ergot given. Dr. I. E. Taylor being in attendance, made an examination and confirmed the diagnosis, and as the preparation of ergot failed to produce the prompt effect desired, a fresh infusion of the same drug was ordered. At this time the hemorrhage had ceased, and therefore the operation of plugging was not again resorted to. About half an hour after this I visited the patient, and found her flooding frightfully and on the verge of syncope. The uterine pains had been severe but not regular. Brandy and carb. ammonia were given *ad libitum*, while I proceeded to make an examination and remove, if possible, the cause of the bleeding. I found the os dilated, and sufficiently dilatible to allow the hand, with slight pressure, to enter the cavity of the uterus, when I discovered the existence of an hour-glass contraction with a large portion of the placenta adherent above and below the constriction. After a good deal of difficulty the adherent portion was removed, but notwithstanding this the organ contracted so imperfectly that hemorrhage still continued. Thinking that in the already exhausted condition of the patient the prompt arrest of the flow was of vital importance, I injected into the cavity of the womb a solution of the pernitrate of iron (3 i. to $\frac{3}{4}$ iss. of water), which being done the flooding ceased entirely. After several hours she began to rally, and under the influence of proper sustaining treatment she is now (Aug. 17th) convalescing very fast.

CASE OF TETANUS.

[Reported by ESKINE MASON, M.D., Acting House Surgeon.]

PETER SHANE, butcher by occupation, of strong muscular habit, unmarried, German, aged 45. Was admitted to the hospital, in the service of Dr. S. S. Crane, August 11th, 1860, at 6½ P.M.; suffering from tetanic spasms. Patient stated that he had been employed in a bone-boiling establishment, and three weeks previous to his admission he had received a wound in the palm of his hand from a small spicula of bone. He had experienced no trouble whatsoever from the wound until eight days ago, when he was seized with pain in the injured limb which extended up to the shoulder. A short period before entering the hospital he was taken with tetanic spasms. Upon admission he was suffering from attacks of opisthotonos, there was also considerable trismus, he being unable to open his mouth wide enough to admit the finger. There was a

small scar upon the palm of the right hand just over the metacarpal bone of the little finger. Patient at first was unable to remain in bed for more than a few minutes at a time, on account of the repeated occurrence of severe attacks of opisthotonos, which seemed to be aggravated by the reclining posture. He was also unable to take any fluid while lying down.

Brandy was freely administered by the mouth every hour, and an injection of tinc. assafoetida $\frac{3}{4}$ ij. His spine was occasionally rubbed with a solution of veratrine (gr. iij. alcohol $\frac{3}{4}$ j.) which seemed to alleviate the spasms to some degree. The scar upon the palm of the hand was freely incised and poulticed. The spasms, however, continued every ten or fifteen minutes with greater or less intensity. At 4 A.M., Aug. 12, brandy had to be discontinued by the mouth, so great was the difficulty of swallowing. Pulse 76. Patient has been improving since 11 o'clock, he has had but two attacks of opisthotonos, is now quiet, though he has slept none since his admission. An injection of brandy, $\frac{3}{4}$ ij. tinc. assafoetida $\frac{3}{4}$ j. was administered, and brandy $\frac{3}{4}$ j. was ordered to be given by the rectum every hour, provided the patient was unable to swallow. This treatment was kept up without any modification till ten o'clock, when, although the patient was to some degree under the intoxicating effect of the brandy, the spasms again began to recur with considerable violence. At this time chloroform was administered by inhalation, which immediately controlled his spasms. And now, for the first time since four o'clock, was the patient able to swallow. He took $\frac{3}{4}$ ss. of brandy by mouth with five gr. of assafoetida. The inhalation was continued till five minutes after eleven, when he had a slight spasm, and ether was substituted for the chloroform. He now had a severe attack of opisthotonos, and became livid in the face, seemingly due to the ether, which produced considerable irritation of the larynx and bronchial tubes; there was also some frothing from the mouth. Even while under the effect of ether he had several general spasms continuing from one to fifteen minutes, and marked with greater or less violence. The respiration and pulse were also more accelerated while under this anæsthetic than while he was under the influence of chloroform. 12 M.—There was profuse perspiration, which was greatly relieved by rubbing him with a mixture composed of brandy Oi., capsicum 3 i., chloride sodium 3 ij. About one o'clock he had a severe attack of opisthotonos, followed by a general spasm and continued trembling of the lower extremities. His pulse was 122, and small. The bowels now moved for the first time; beef-tea and brandy injections were now given alternately with those of brandy and assafoetida. At 2 P.M., the ether was changed for the chloroform, it acting much better and not producing such irritation of the larynx and bronchial tubes. Whenever a spasm was commencing a few inhalations of the chloroform would check them almost entirely. 8 P.M.—Patient took beef tea and water freely by the mouth; he also got up and had his bed made. He evidently was much better, though his skin was hot and he complained of great heat. 5 A.M., Aug. 13.—He drank water and beef-tea frequently since last note, and had no spasm of any severity since eight o'clock last night. Pulse 100 and of better volume than it has been. Patient continued taking beef tea, brandy, and assafoetida by mouth, which he now could open to a greater extent than even before. He, however, sweated profusely at times, and complained of great heat, which was relieved by rubbing him with the brandy, capsicum, and salt. All his symptoms began to look so favorable that we now hoped for a favorable issue, but at eight o'clock he had two or three most violent attacks of opisthotonos following one after the other. He died at 8.15, just at the close of one of the attacks; apparently from exhaustion, he having slept none except while he was under the influence of an anæsthetic.

The post-mortem examination, which was made twenty-eight hours after death, presented the following appearances:—Body well nourished; rigor mortis slight, though better marked in the lower extremities; tympanitis well

marked. No marks of violence apparent upon the body. Post-mortem congestion well marked upon the face, neck, and back. Dark-colored blood oozed from his nose. There was considerable effusion over the membranes of the spinal cord, which were very much congested. The cord was also exceedingly softened. Brain.—Dura mater was natural; superficial vessels of the brain very much injected, and of arterial hue; brain substance very much softened, as well as the medulla oblongata. There was no effusion in the ventricles. The other organs were not examined.

NURSERY AND CHILD'S HOSPITAL.

BRONCHIAL PHTHISIS—PERFORATION OF THE BRONCHIAL TUBE.

IN cases of tubercular disease, occurring in young children, it is well known that the bronchial glands are very generally the seat of extensive deposits. According to Riiliet and Barthez, these glands are, with the single exception of the lungs, the parts most frequently invaded, and between the glands and the lungs the difference is slight. As yet, the cases of phthisis in the Hospital have been too few for any reliable deduction. Only eight post-mortem examinations of consumptive children have been made during the past fifteen months; but these go to show not only the frequency of tubercular deposits in the bronchial glands, but also that here they obtain their maximum size. In one of these cases, no tubercles were found in the lungs, but the glands were transformed into large tubercular masses. In the subjoined case, the right lung was free from tubercles, and only a few were found in the left lung, while the advanced state of the tubercular disease in the glands showed that they had long been affected.

It is worthy of remark, that this patient's symptoms differed in some respects from those laid down in the books, as occurring in bronchial phthisis. West says, "by degrees this cough becomes severer; it returns in paroxysms, not unlike those of pertussis. * * The respiration grows habitually oppressed and wheezing; the face becomes puffed and swollen." So far from this being the case, his respiration was in no way sensibly disturbed, and his cough was slight and hacking. In this respect the symptoms differed also from those of pulmonary phthisis, for tubercles in the lung of the infant, if extensive, will very generally in the end excite inflammation, and then are superadded the symptoms of pneumonia.

The point, however, of greatest interest in this case, was the perforation of the left bronchus at its first division. At this place were the softened remains of a large tubercular mass, much of which had evidently been expectorated. This tubercular product, besides perforating the bronchus, had completely destroyed one of its primary branches to the extent of a few lines. This branch disappeared, and reappeared abruptly, and its mucous membrane, which escaped destruction, was reddened and thickened. The injury to the air tube may have been increased by removing the lung at so distant a period after death; but with all possible allowance for this, it is evident the air must have been shut off from a considerable portion of the left lung before death, and probably it had escaped into the pleural cavity.

[Under the care of Dr. WM. W. JONES.]

AUGUST 10th, 1860.—G. M., aged nineteen months, was admitted into the Hospital on the 24th ult. in an emaciated state. His mother is healthy, but his father is in one of the hospitals, in the last stage of tubercular disease. At the time of admission, this child had an occasional dry cough, but his respiration was easy and regular, and he was free from pain. He had rather frequent dejections, with occasional vomiting. He was carefully attended by the nurse, and placed under sustaining treatment; but there was no material improvement, though his appetite was good. For a short time he would revive and be amused by objects

around him; but this improvement was immediately succeeded by great prostration. His symptoms underwent no material change till the 7th instant, when he was noticed to be unusually pallid and prostrated, and at one P.M. he suddenly died.

Autopsy, three days after death.—Bronchial glands much enlarged, and all or nearly all of a light color; evidently tubercular; for the most part they were firm, resisting pressure, but in some there was central softening. One, in particular, nearly the size of a hickory-nut, was so soft as to present a creamy appearance in the interior. On attempting to inflate the lungs, the air escaped at the first division of the left bronchus, and on examination an ulcerated opening was found at this point; one of the branches also was completely severed by the encroachment of what had evidently been a large tubercular mass, and a portion of the softened deposit was still remaining. The mucous membrane of the bronchus adjoining the ulceration was raised and thickened, and there was general reddening of this surface, showing the presence of bronchitis. A few tubercles were found in the left lung, but the right lung appeared entirely free from them, and was otherwise healthy. The heart, liver, spleen, and kidneys were also healthy; the mesenteric glands were enlarged, and a few of them tubercular; the intestines were not examined internally, but their external appearance was that of health. Several of these deposits were examined with the microscope, and were found to contain the characteristic cell in abundance.

HOWARD HOSPITAL OF PHILADELPHIA.

EYE AND EAR DEPARTMENT.

[Aural Surgeon, LAURENCE TURNBULL, M.D.]

IN this institution, in explorations of the ear, Mr. Wilde's tubular ear speculum is preferred, the modification of Mr. Toynbee having been carefully tried in a large number of cases, and not found to answer.

Foreign Bodies in the Ear.—In the removal of foreign bodies, the following rules should be borne in mind:—

The presence and pressure of such bodies in the external auditory meatus cause pain, swelling, and inflammation, resulting in a discharge of serum, mucus, or even pus, and frequently terminating in perforation of the membrana tympani. Anæsthetics should be employed, lest in the struggling of the patient injury be done to this delicate membrane.

In all cases where the foreign body is small and smooth, like a bead or pebble, the injection of tepid water or oil will often dislodge it by the reflux of the liquid.

It must be borne in mind that in adults the vertical diameter of the canal is greater than its transverse, while in young children the reverse holds good; also, that the membrana tympani being inclined from above downwards, and from without inwards, care must be taken not to force the foreign body into the angle which is formed at the inner extremity of the canal.

The best forms of instruments are those which are thin and delicate, in two pieces, slightly curved at the extremity, with an opening to receive the foreign body, over which they may be united, or a small steel hook or spoon, which is to be passed beyond the extraneous substance, and then turned. The most important consideration is, that but slight force should be employed, as several cases have come under the knowledge of Dr. T., where loss of hearing has resulted from carelessness in this respect.

When collections of cerumen are to be removed, syringing should not be continued more than three to five minutes, if necessary to be repeated in a day or two. It is also best to use a weak solution of the carbonate of soda or potassa. To get rid of the air, which is a great source of annoyance to the patient, the elastic syringe of Davidson is used.

American Medical Times.

SATURDAY, SEPTEMBER 1, 1860.

WHAT SHALL WE DO WITH THE INSANE?

THE wretched condition of the Insane confined in the county Alms-houses of the State of New York is beginning to attract public attention, and an indignant public will, ere long, demand of the Legislature that attention which it seems so unwilling to grant. It is true that the State has granted money liberally for the erection of a Central Lunatic Asylum, and that a portion of the insane have been properly provided for, but even at the time of its erection (twenty years ago) it was admitted that it would not accommodate one-half of those requiring its care and protection. Whether insanity is or is not on the increase, in proportion to the population, we have not the means of determining, but that there has been a rapid increase in the numbers of those needing public care and protection admits of no question. Large numbers of the insane are now confined in Poor-houses and Alms-houses, with no other care than that of the Keeper, whose time is occupied with other cares; who is often totally ignorant of the nature of insanity; and who too often has but two motives of action, viz. to get along with as little trouble as possible to himself, and the least possible expense to the county. The welfare or comfort of the poor patient seldom or never enters into consideration. We have no doubt, however, that those who have the care of the insane under such circumstances, err more frequently from a want of proper conveniences or from a lack of knowledge of what could be done, and what requires to be done, than from any wilful or intentional neglect. It is necessary that every insane patient should in one sense be considered a *ward* of the State, and that the Legislature has not done its duty until its supervision is extended to *all the insane*, wherever confined, or wherever found. If the exigencies of society require that a man should be deprived of his property and liberty, and his person confined without any crime on his part, society is at least bound to see that he is not subjected to abuse or unnecessary restraint and severity; the State should also see that his wants are supplied, and that he is made as comfortable as his unhappy condition will permit. The facts relating to this subject need but be known, to excite indignation and pity in every humane mind. In the State of New York, where certainly the insane poor are treated as well as in any other State in the Union, there may be daily witnessed in poor-house "mad-wards" such scenes as shame humanity, and disgrace our boasted civilization. "The treatment of lunatics and idiots in these houses is frequently abusive,"—say the Committee that visited our Charitable Institutions and Poor-houses in 1856.—"The cells and sheds where they are confined, are wretched abodes, often wholly unprovided with bedding. In most cases female lunatics had none but male attendants. * * * In some poor-houses the Committee found lunatics, both male and female, in cells in a state of nudity. The cells were intolerably offensive, littered with long accu-

mulated filth of the occupants, and with straw reduced to chaff by long use as bedding, portions of which, mingled with the filth, adhered to the persons of the inmates, and formed the only covering they had." Such were the sights witnessed by Senator Bradford and his associates as they went from town to town in the State whose proud motto is—"Excelsior!" To this painful subject we will refer more fully in a future article, and our columns will ever be open to the faithful exposure of such abuses and woes of the insane and the helpless. Turn we now to the more humane provisions which the State has made at its great Central Asylum. Not only do the managers of that institution testify to the painful truth of the facts just mentioned, but they speak of the utter inadequacy of that Asylum for the care of even a moiety of the insanity in the counties dependent upon it as their only remedial hope.

The Superintendent of the State Lunatic Asylum at Utica, Dr. Gray, in his report made in 1859, says:—

"The Institution has been constantly crowded, the daily average being five hundred and nine, which is thirty-six above that of any previous year. * * * We have now, however, reached the fullest capacity of the buildings, and cannot expect, nor would it be wise, to extend the arrangements for more than the present number of patients. It will be observed that we have received an average of one patient for every week-day throughout the year, and yet we have been compelled to refuse pressing applications from all parts of this, and from other States. We have also been obliged, as in former years, to send home to the care of friends, and to the receptacles connected with the county houses, a number of patients as unimproved. Of the eighty-six thus discharged, thirty-four were quiet, harmless, and easily cared for in their families; thirteen were incurable, and were removed to institutions in this or other States, for permanent custodial care; nine, whose friends were unable longer to meet their expenses, were removed, in order to be taken care of in rooms especially arranged for them in their houses; thirty were more or less demented, though apt sometimes to be noisy and destructive, and therefore difficult of care in county receptacles, where the means of moral and even medical care are generally very inadequate. Indeed such cases are usually confined in small rooms, and not unfrequently chained and manacled, other restraint not being deemed sufficient to prevent them from destroying their clothing, and demolishing the wooden or lath and plaster walls generally adopted in such cheap structures. While many of these cases would have further improved by protracted treatment, the great majority were incurable. Among the more hopeless of recovery were those who remained more or less violent, and yet were necessarily removed to make room for recent cases, still more difficult of care, and who were in the stages of disease offering the best hopes of restoration. Many of those heretofore sent away as incurable have been returned, the circumstances surrounding them among their friends, or at the county houses, exciting their violent propensities, and rendering them eminently dangerous, except under the discipline of an organized institution."

The Report of the New York City Lunatic Asylum also shows a continued increase in the number of patients. Dr. Ranney says:—"Besides the inmates of this Institution, there are at least two hundred insane persons in other departments of the Island. Their number is increasing with such rapidity, from year to year, that it seems necessary to collect definite facts to show the reasons of this result."

The Editor of the *Journal of Insanity*, in view of the above facts, makes the following comment:—"The urgent necessity thus indicated, of further provision for the insane in this State, has been so frequent, for so long a time, and

from so many different directions, pressed upon the notice of the Legislature, that a total neglect to meet its demands has become discreditable in the highest degree. The lack of any well considered theory and any definite policy in the administration of great public charities, is also as unworthy the intelligence of a community as the sad results are a reproach to its generosity and Christian sympathy."

When the first Act was passed by the New York Legislature for the erection of a State Lunatic Asylum, in 1838, Commissioners were appointed, whose duties were to prepare a plan adapted to the wants of the State, and which was to be submitted to the state officers, and if approved by them, was to be adopted. The Commissioners, after visiting most of the Asylums in the United States and conferring with the different superintendents, matured a plan which was submitted to the state officers and approved by them. Accordingly, in conformity with the directions of the Legislature, the Commissioners commenced the erection of the several buildings contemplated. The original plan contemplated the erection of four distinct buildings, inclosing a hollow square of several acres, and connected with each other at the angles by verandas. The four buildings were intended to accommodate one thousand patients and their necessary attendants, such being the amount of accommodation deemed necessary by the Commissioners and state officers, in 1838, more than twenty years back. The present site of the State Asylum was purchased, the citizens of Utica contributing liberally towards the purchase. The foundations of the four proposed buildings were laid, when the Legislative appropriations were exhausted. An application was made to the next Legislature for additional funds, but, becoming alarmed at the prospect of expenditure, on making an additional appropriation they directed the Commissioners to apply the funds to the erection of one of the proposed buildings. This was done. By an Act of the Legislature, passed May 26, 1841, a Board of Trustees was appointed, who were required "by such committee of their number as they shall appoint, to visit institutions for the keeping and management of lunatics in this and other states, and inquire into their government, organization, and internal arrangements; and submit to the Legislature a system for the government, discipline, and management of the State Lunatic Asylum; and regulations for the admission of patients." The Report was made January 7, 1842. At its close, the Trustees state:

"In conclusion, the trustees indulge the opinion, that under such an organization, and a system of discipline and management as is herein indicated, the Asylum will fulfil the benevolent objects of the government, and the just expectation of the community. Yet it should not be forgotten, that what the state has now done—the erection of the present edifice—forms but the smallest and most insignificant link of a mighty chain of merciful measures, which must lengthen with our increased acquaintance with the laws of the human mind, and can only terminate when the insane are out of the land."*

The single building erected could accommodate only from 250 to 300 patients, whilst, in 1841, the Secretary of State had reported more than 800 lunatics supported at the pub-

* The Board of Trustees was composed of the following persons:—David Russell, President; W. H. Sherman, N. Devereux, C. B. Coventry, and P. S. Faxton. It surely is no small compliment to the Board that in eighteen years of practical application of this system of regulations recommended, no material alterations have been adopted, or found necessary, whilst they have been substantially adopted in several other and more recent Asylums.

lic charge, exclusive of several counties from which no report had been received. The Trustees estimate that, exclusive of those confined on Blackwell's Island, there were four hundred and thirty lunatic paupers in the state confined in jails and poor-houses. There are now more than twice that number. The Asylum had been but a short time in operation, under the judicious management of the late Dr. Brigham, when it was not only found totally inadequate to the wants of the State, but from the limited means for classification, it was paralysed in its efforts, and was not as well adapted for the purpose as a single building which had been intended to be complete within itself, and not a part of a large establishment. An appropriation was finally made by the Legislature to erect new buildings. The original plan was abandoned by the Board of Managers under the advice of the Superintendent, and the new buildings were erected as wings to the former building, doubling the accommodation. The utmost capacity of the Asylum, at the present time, admits about five hundred. Thus it is seen, that as early as 1840 the first Board of Commissioners recommended provision for one thousand patients. The Trustees, in 1842, say that the building then erected should be only the beginning.

Since that period, numerous and repeated applications have been made to the Legislature, for the erection of new asylums for further accommodation of the insane. An Asylum has been erected in 1853, in Auburn, for insane convicts from the prisons; but this affords but slight relief to the hundreds who have been guilty of no crime, but are now languishing, or suffering worse torture than the criminals, in our poor-houses and alms-houses. The period has at length arrived when the subject can no longer be ignored or postponed; the moans of the poor maniac confined in dungeons, or chained to the floor, must and will be heard; the cruelties inflicted on this most helpless class of our fellow-citizens are a disgrace to a civilized community. The Legislature must either provide for their wants by the erection of additional asylums, or exercise some supervision over their treatment, in the places where they are now confined.

In a subsequent article we propose to review the different plans of relief which have been at times recommended, and consider the question whether it would not be wiser to establish some well devised and matured plan for the protection of the insane, and other Charities of the State, than allow them, as heretofore, to be governed by temporary expedients.

THE WEEK.

We publish the following announcement, which appeared in the public prints, in order to give it publicity in the medical profession, for which it seems especially designed:—

Office of the Commissioners of Public Charities and Correction, }
Botunda Park, New York, Aug. 18, 1860.

TO THE MEDICAL PROFESSION.—The Commissioners of Public Charities and Correction will receive applications from MEDICAL STUDENTS, Graduates from Medical Colleges of eminence, for the positions, now vacant, as ASSISTANT PHYSICIANS at Randall's Island Hospital for the Treatment of Children, and at the Island Hospital, on Blackwell's Island, for the Treatment of Adults. Also for the position of two Assistant Physicians at the Lunatic Asylum, and one Assistant Physician at Island Hospital on Blackwell's Island, the vacancies of which will occur on the 1st of September next.

Applicants will present their testimonials as to their qualifications to the undersigned Commissioners.

S. DRAPER, M. H. GRINNELL
JAS. B. NICHOLSON, ISAAC BELL, Jr.,
Commissioners.

The paper in which this advertisement appeared contained the following explanatory paragraph:—

"The twenty-six assistant-physicians in the various hospitals have heretofore been appointed on the recommendation of the head physicians, but the Commissioners of Charities and Correction have introduced a new system in this respect. They believe that the present method is liable to abuse, and that it gives an opportunity for a system of favoritism injurious to the hospital practice. They have accordingly advertised for proposals, and will receive sealed applications, in which persons desirous of obtaining the places are expected to state their claims and give their recommendations. From these applications the Board will make selections."

The method of appointing the medical assistants in the institutions above named gives the chief medical officer the power of nominating the applicant, whom he has selected, to the Board of Commissioners, who may confirm or reject the candidate at their pleasure. We can conceive of no system of appointing subordinate medical officers, in an institution having a resident medical head, more just than this, and more likely to result in the selection of an efficient staff of assistants. But the Commissioners, in their zeal to reform the Alms House Department, have, it would seem, now undertaken to fill the subordinate medical appointments without previous consultation with the resident physicians of the several institutions in which these vacancies occur. Favoritism on the part of the medical officers in making the selection of assistants, injurious to the hospital practice, is alleged to be the cause of this change. This statement would seem to imply that the Commissioners have not sufficient confidence in these officers to entrust them with the selection of their assistants. If this is the case, the reform should certainly commence with the discharge of these officials, and the appointment of reliable men. We believe that the system which the Commissioners are about to inaugurate can never work harmoniously, for the following reasons:—1. The educational qualifications of the applicant cannot be determined by the recommendations which he may produce. Every medical man who has had any experience in the selection of medical assistants in our hospitals, knows well that the applicant who is bolstered with testimonials is, in general, the least qualified, and requires the most searching examination. 2. The medical assistant is subordinate to the resident physician in all his duties, and it is but right that his special qualifications should be approved by his superior. This is necessary also to that harmony which should exist in the resident medical staff of a hospital.

The story of the resurrection of the pirate Hicks, by the aid of electro-chemical baths, set afloat by an obscure paper seeking notoriety, illustrates forcibly the moral tone as well as the general intelligence of those who conduct some of our secular papers. Though the report was far more improbable than the celebrated Moon Hoax, one paper, at least, acknowledges that its reporters were sent to the Marshal's office, and also to the physicians whose names were connected with the story, to ascertain the truth of the rumor!

INTRAMURAL interments in cities and large towns should be prohibited by law. In the upper wards of the City of New York the dead are daily interred in localities that in less than twenty years will be densely populated. Correspondents of the daily press, and the numerous signed memorials to legislative bodies, are ever reiterating the claims of the silent dead, and maintaining the sanctity of places of sepulture; and to all this, our instinctive affections, and all the considerations and reminiscences that cluster about the departed, heartily respond. But in addition to the considerations which the universal sense of humanity intuitively presents, there is another and scarcely less important—though hygienic reason—why the sacred ashes of the dead should not be exhumed, nor their places of sepulture be profaned by converting them into places of residence, or into marts and avenues of trade. The earth of a well-filled burial-ground is necessarily saturated with mephitic gases to such an extent that even after the dead have been exhumed, such places are unfit and dangerous sites for dwellings. In view, therefore, of the interests of human health, as well as of the sanctity of human sepulchres, we utter our protestations against all needless interference with the remains of the dead in their graves, and against the continuance of interments in cities or places that are liable hereafter to be disturbed by the demands of trade. Let the dead be buried in rural and suburban grounds, naturally or artificially secluded for ever from the encroachments of Mammon. And for the benefit of the public health and the rights of the living, no less than for the memories of the grave, let all existing cemeteries in cities and in villages be by statute preserved as public grounds, where, otherwise, the lungs of crowded streets would become wholly obstructed. Kept inviolable, like the Athenian Πηλαργικον, these long used resting-places of the dead—with health-giving sunlight and air, green trees, flowering shrubs, and the fragrant turf—will impart fresh vigor to the living; and in thus perpetuating and improving such natural reservoirs of fresh air and health, cities would discover that great hygienic principle which lay hidden in the saying of the Scythian oracle—

"Best is Pelægic empty."

Again we say, let all the old cemeteries in our cities and populous villages be preserved as *oases* of health and natural beauty.

We are pleased to notice in the reorganization of the New York Medical College, the establishment of a Chair of Infantile Pathology and Therapeutics. This is the first time that this most important department of practical medicine has received in this country the consideration which it merits, being generally incorporated with the chair of midwifery, and consequently receiving but little attention. It is gratifying to notice also that the gentleman selected to fill this chair, Dr. JACONI, is in every respect qualified to render it popular with the profession and students. We trust that other schools will follow the example, and establish chairs devoted to the elucidation of the diseases of children.

THE Society of Medicine of Lyons has, after long discussion, come to the conclusion,—That ether as an anæsthetic is less dangerous than chloroform; that anæsthesia is obtained as well and as certainly by ether as by chloroform; and therefore that ether ought always to be preferred to chloroform, the inconvenience of it being slight.

Reviews.

ON INFANTILE MORTALITY AND THE ESTABLISHMENT OF HOSPITALS FOR SICK CHILDREN. By WILLIAM MOORE, A.B., M.B., Physician to the Hospital for Diseases of Children, &c. Dublin: 1859. pp. 27.

At a festival in aid of the funds for the Hospital for Sick Children, London, the Chairman, Mr. Charles Dickens, said:

"That from the earliest days of his life it had been one of his maxims to disbelieve the man who told him that he took no interest in children. He felt still bound to that principle by all sorts of considerations, because he knew that any heart that could toughen itself against these little people, must be wanting in so many humanising experiences, as to be a perfect monstrosity in nature."

The subject of this pamphlet is one that in the opinion of the author, and in our own also, should interest every one. If it is true, as stated by Mr. Simon, "that a high local infantile mortality must necessarily indicate a high local prevalence of those causes which determine a degeneration of race," it is of the utmost importance to search out and remove the causes of such mortality.

The author first exhibits the infantile mortality of different countries, and then the measures that have been adopted for the relief of this class of sufferers. In England 26 per cent. of all born perish before the end of the fifth year; in London 35 per cent. perish before the 10th year; in Scotland 40 per cent. of the entire deaths are under five years of age; in Liverpool nearly half a generation is exhausted at the same age; in Australia the deaths greatly exceed the births in some seasons of the year. The statistics of infantile mortality of New York are obtained from Dr. Reese's paper in the Transactions of the American Medical Association for 1857, and are thus stated:

"In the city of New York, the whole mortality of the last half century amounted to 363,242 (including the still-born), whilst the number of deaths under five years of age were 176,043, which is nearly 49 per cent. of the entire city mortality. That the infant mortality in New York is on the increase, is evident. In 1853, the deaths under five years of age numbered 12,963, while in 1843, only 4,588 such deaths occurred, showing an increase of 8,375 within ten years, which is vastly beyond the proportioned increase of the population of the city during the decennial period, as shown by the census. This increased infant mortality in 1853, compared with 1843, is in a ratio very far beyond that of the aggregate of the deaths in persons of all ages. The deaths under five years in 1853 were 12,963, while the deaths of all others in the city, of every age, numbered only 9,749—so that the infant mortality exceeded all the other interments for that year by 3,224!"

Passing over the interesting investigation of the diseases which prove fatal to the young, the reader will be interested in the notices of the different institutions for sick children which have been created. The Hospital for Sick Children, of London, was established in 1852:

"This valuable hospital, patronized by her Majesty the Queen, has for its objects: 1. The medical and surgical treatment of poor children. 2. The attainment and diffusion of knowledge regarding the diseases of children. 3. The training of nurses for children.

"The Times of November 9, 1857, writes of this institution thus: 'It is still the only hospital in the metropolis specially set apart for the reception of sick children, whilst

yet 400 out of every 1,000 deaths last year in this city, were stated by the officer of health to be those of infants under five years old.' The following facts shew the urgent necessity for the due support of this and similar institutions in the great metropolis: 1. The mortality of children under ten years, is only 2 per cent. less than it was fifty years ago; of 50,000 persons dying annually in London, 21,000 are children under that age. The hospitals of London are inadequate to afford accommodation for sick children. In January, 1843, of 2,363 patients in all the hospitals, only 26 children were under ten, suffering from diseases peculiar to their age. Medical knowledge concerning children's diseases, is very defective, owing to the want of sufficient opportunities for their study. A special hospital for children is needed, because the proper care for sick children requires special arrangements. Children's hospitals have been established with success in seventeen of the chief cities of Europe, but there was not one in the United Kingdom until the present hospital was established. We find that during the past year, 325 in-patients and 9,025 out-patients have been admitted, making a total of 1,483 in-patients, and 39,330 out-patients, who have received the benefits of this hospital since it was opened in February, 1852."

The next institution is the Royal Infirmary for Children and Women, also of London:

"This institution, founded in 1816, originally bore the name of the Royal Infirmary for Children, and was established for the purpose of rendering prompt medical aid to the infant poor of the metropolis. It contains 16 beds for in-patients, 13 of which are appropriated to the Parish of Lambeth, and 3 open to the metropolis generally. The Parish of Lambeth has been the means, through the Trustees of the Hayles' Estate, of materially assisting the charity, by an annual payment of £450 towards its funds, on the condition that 13 out of the 16 beds be appropriated to its parishioners. Thus, the original intention of the founders to convert the Infirmary into an Hospital has been accomplished, and the sphere of its usefulness considerably enlarged. The average number of cases benefited up to the present time has been at the rate of 5,000 annually."

Of the Clinical Hospital for Diseases of Children, Manchester, the author says:

"The objects of this institution are set forth: it is intended not more as a charity than as a clinical school for the department of medical science to which it is devoted. To carry on scientific investigations into the causes, nature, and treatment of diseases of children; to inquire into the causes and character of the principal infantile diseases prevalent in Manchester, the progress of physical development in childhood, and the causes which hinder its due advancement: the different modes adopted among the poorer classes, of nursing, feeding, and managing their children, with the development respectively of health and disease: to impart instruction to mothers and nurses, and to spread sound principles on the subject of nursing and managing children amongst the lower ranks: to afford to students and young practitioners opportunities of acquiring practical knowledge in this branch of medicine, and to deliver periodically for this purpose, clinical lectures, illustrated with appropriate cases, on the importance of separate establishments for infantile diseases."

The following interesting sketch of Continental Hospitals we quote at length:

"Turning to our continental neighbors, and as if before entering the Hospital of the Enfants Malades at Paris, let us calmly review the following general statement lately made by M. Bertillon before the Academy of Medicine of Paris. In a period of ten years there have been in France 9,700,000 births, and of these children 1,500,000 died within the first year of life. Out of 1000 female births

858 girls reach the age of one year, whereas 1000 male births yield but 858 boys one year afterwards. In other words and in round numbers, it may be said that out of 100 children of each sex from birth to one year of age, the annual deaths are 20 boys and 16 girls, viz. one fifth part of the boys and one sixth of the girls. This law is so constant that it holds good for the whole country or each department taken separately, with extremely slight variation. The total number of sick children treated in the Hospital of the Enfants Malades in 1855 was 3718, deaths 694, or at the rate of 18.66 per cent.: for a period of years the average mortality was about 1 in 5.20, or about 19.25 per cent. The number of beds usually occupied is about 320, and the annual expense of each £25; daily cost of each patient about 17 pence.

"The Empress Eugenie has established a hospital for the treatment of diseases incidental to children, called after herself. In the year 1855 an average of 308 beds were filled. In this institution the rate of mortality was 1 in 6.09 in 1854, and in 5.40 in 1855.

"St. Anne's Hospital for sick children at Vienna, is well worthy of comment; it now forms an integral part of the justly celebrated medical school of Vienna, founded by the late Professor Mauthner; it continued to thrive under his care for an average of nineteen years. Previous to 1855, the ratio of mortality has been as high as 24.50 per cent. The cost of each patient, the strictest regard being had to economy, has been reduced to 23 shillings, the mean daily cost of each about 16 pence: 49 physicians availed themselves of the clinical instruction afforded on this most important branch of medical science; and 78 females were instructed as regards the hygienic principles of managing children, not only in sickness but in health—the out-patients numbered 4,146. The mortality amongst this latter class was about 6.6 per cent.

"A branch hospital has been established at Baden, thus affording to the scrofulous patients an opportunity of using the mineral waters. The contingent expenses thus incurred were met by a theatrical benefit. The occasional endowment of a bed or beds, to which the name of the founder is appended, clothes, and various contributions, are equivalents to revenue to a great extent; and thus this hospital has been enabled to save a reserve fund of £750 which, added to the capital, tends to secure its independence. The annual cost of the working of this institution is about £1000.

"The Children's Hospital at Berlin (Elizabeth's), founded in 1843, has since been sedulously patronized by her Majesty, the Queen. This institution, owing to civic commotions and other causes, has not been able to furnish more than fifty beds for the object of the charity. The revenue for the year 1855, is made up of various contributions besides money, viz. clothing, fruits, medicines, toys, &c., the names of the donors being carefully inserted in the report. By contracting the sphere of its usefulness, not only has this institution been enabled to weather the stormy political years it has passed, but a balance of 200 dollars in its favor is specified in the last account. The building contains a play-room, besides the open air play-ground, and a nice garden. The debt on the building now amounts to only 500 dollars. The managing committee of this institution, is composed of members of the nobility, medical profession, clergy, and others, besides the committee of ladies, who take a lively interest in the economic department, and in seeing the directions of the physicians fully carried out. The city of Berlin supports another similar institution. The average mortality in the Elizabeth's Hospital for the past seven years has been 1 in 8.5 or 11.7 per cent.

"From the report of the Children's Hospital at Stockholm for 1855, we find 183 patients were admitted: the mean number of beds filled was thirty-one; average time of residence sixty-three days, and mortality 20 per cent.; in the year 1854, 17 per cent.

"Professor Von Duben arranges his patients on admission in three classes: first apparently hopeless: second, danger-

ous: third, simple ailments. Eighteen cases were admitted of the first class, of which sixteen proved fatal: sixty-six of the second class were admitted—of these eighteen died: of the third division, ninety-nine were registered, and only three died. Of eighty-six students attending the Medico-Chirurgical Institute of Stockholm, fifty-three attended the clinique for sick children, so ably conducted by Professor Von Duben, Huss, and Santeson."

After a notice of the institution established in Dublin, in 1822, the author concludes with the following interesting comparison of the mortality among children within and without these special hospitals:

"We have already seen that the mortality of children in London up to the tenth year, is about 35 per cent., and the mortality in the Children's Hospital averages 14 per cent. This, though not a very low mortality, yet is a very favorable contrast. In Manchester, where the computation is that 55 per cent. of children die before they reach the age of five years, the mortality, according to the last report of the Children's Hospital, was at the rate of 13.35 per cent. But looking to the returns of the continental institutions, we find that in Vienna, taking a mean of eighteen years, the deaths of children of all classes amount to 60 per cent. and the average mortality of the Children's Hospital about 24½ per cent. These percentages are appallingly high; even the mortality in the adult hospitals in Vienna ranges as high as 14 per cent. equal to that of the London Children's Hospital. Over all Austria the computation is, that 26 per cent. of children born die in their first year, and 37 per cent. within the first four years.

"In Paris, in 1820, '1441, or nearly 33 per cent. perished in the two first years of infancy: in the fifteen years previous to 1831, the average deaths of all children born were upwards of 18 per cent. within the first year, and 28 per cent. before the completion of the fourth year of existence. For a long average of years 19½ per cent. has been the average mortality in the great hospital for sick children in Paris."

"Casper, the eminent statistician, has informed us that in Berlin in an average of forty years, up to 1822, all children born there, 52 per cent. died in the first year; while during the war in the early part of the present century, 71 per cent. perished. An average of years shows the mortality of the Hospital for Sick Children in Berlin to be only about 11 per cent.

"Of 1,066 children under seven years of age in the hospital at Milan in 1866, the deaths were 168, or 15.76 per cent.; of youths from eight to fifteen years 2095 were treated, and the deaths were 154, or 7.35 per cent."

SPECIAL HOSPITALS.—The construction of hospitals for the treatment of special diseases, is now strongly opposed by the leading physicians and surgeons of London. In a paper numerously signed, it is stated—"The practice is injurious—First, because in the maintenance of numerous small establishments the funds designed for the direct relief of the sick poor are wasted in the useless multiplication of expensive buildings, salaries, and hospital appliances, and in the custom of constantly advertising to attract public attention. Secondly, because the public is led to believe that particular classes of disease can be more successfully treated in the small special institutions than in the general hospitals—an assumption directly contrary to evidence; the fact being that the resources of the general hospitals are in every respect superior to those of the special institutions alluded to. Thirdly, because it is essential for the interests of the public, with a view to the efficient education of students preparing for the practice of the medical profession, that all forms of disease should, as far as possible, be collected in the general hospitals to which medical schools are attached."

Progress of Medical Science.

OBSTETRICS AND DISEASES OF WOMEN.

By E. NOEGGERATH, M.D.

On Peri-Uterine Hematocoele and its Treatment. By C. R. BRAUN. (*Zeitschrift d. Gesellschaft d. Aerzte zu Wien. January, 1860.*)—After a few preliminary remarks on the different forms of the disease, as far as it has reference to origin and seat (intra and extra-peritoneal), Dr. Braun proceeds to give the complete history of some cases, which occurred in his clinique for female diseases. The first of these instances has certain points of interest, and reads as follows:—Mrs. R. Schmidt, 34 years of age, entered the hospital on the 29th of June, 1859. Her courses appeared for the first time when she was 17 years old, and continued regular for three years; about that time, when 21 years of age, she became pregnant, and was delivered of her first child. After this she had three more children, all of these were delivered without difficulty by the assistance of a midwife. Towards the end of May, 1859, the patient attended her field-work at the time of her being unwell, and was during this occupation seized with violent pains in the lower part of the abdomen, which lasted for a couple of days, being accompanied with vomiting, and constipation of the bowels. Eight days previous to her admission into the hospital, her illness increased in intensity, the discharge of urine became painful, and at last so much impeded that it could only be voided by repeated introduction of the catheter. On examining the abdomen, a tumor was discovered as large as a man's fist, very tender to the touch situated on the left side as high as the iliac spine. Through the vagina it could be ascertained that the lower section of this tumor, which occupies the retro-uterine cul de sac, reached as far down as the floor of the pelvis, compressing the vagina; the neck of the womb appeared to be raised above and pressed against the symphysis pubis. The tumor itself was elastic and fluctuating, but immovable. The rectum was situated behind the mass and was somewhat compressed; catheterism of the bladder met with no obstacle. Although the presence of a retroflexion of a pregnant uterus or of an ovariocele appeared to be improbable, a restitution of this pelvic tumor was attempted on July 1st, and failed. After this a uterine sound was introduced into the womb; it passed quite easily in the usual direction as far as 3', so that its point could be perceived distinctly 1½" above the mons veneris, below the fundus of the uterus which latter appeared to be quite movable. Thus intra-uterine pregnancy, retroflexio uteri, and ovariocele could be excluded. In order to relieve the patient of the distressing symptoms from retention of urine, the retro-uterine tumor was tapped on July 5th by means of an ordinary trocar, and thus a couple of ounces of a reddish-brown fluid were emptied. Immediately after the operation, the tumor diminished in size, the vaginal portion descended about one inch, and the urine could be freely passed. The upper section of the tumor, however situated above the symphysis and close by the left iliac spine, did not collapse. Dr. Braun therefore left the canula inside the tumor for nearly three days, during which period there came away about one pound of blood and pus. After this the fever disappeared entirely, and on July 15th only a very limited quantity of healthy pus escaped from the wound, the tumor disappeared entirely, the patient was discharged entirely well on the 30th of July.

This very interesting case is followed by the history of two more observations, one of an ante-uterine, and one of a lateral hematocoele, both of which disappeared by the external use of antiphlogistics and iodine. But as both of them are not fair examples of the disease which we considered, the writer refrains from giving a detailed account of them. In the general remarks added to the description of the several cases, the diagnosis, prognosis, and treatment

are described with the addition of a short literary review of the pathology of the disease, in such a manner as we find it in most theses on hematocoele. As regards the active treatment of the tumor, Dr. Braun remarks: "The opinions of authors, as to the propriety of puncturing the cyst, are divided. Voisin reports three fatal cases after such operations; Nonat only one in fifteen; Spaeth, Herzfelder, Gallard, Crédé, and Braun himself, have observed favorable results. Most writers are in favor of the operation if the extravasation has occurred recently, if a rupture be imminent, if the laqueur vagina showed a blue coloration, the latter circumstance being a symptom of retro-peritoneal hematocoele. From Dr. West's statements it appears, that out of twenty-sevenappings twenty-two cases proved successful, five fatal; while of fourteen cases which were left alone, eleven recovered and three died."

Observation upon Superfoetation. C. R. BRAUN. (*Zeitschrift d. Gesellschaft d. Aerzte zu Wien. January, 1860. No. 6.*)

—The author very justly calls attention to the fact, that the condition of the placenta and membranes has been too little considered by writers on superfoetation. In the case which Dr. Braun describes, the woman had menstruated in March, 1859, for the last time, and had been delivered of a full-grown healthy female child on the 19th of December. In the membranes of this child was contained another mummified foetus, which had perished apparently towards the end of the third month. The afterbirth of the mature child was normal; the funis had a marginal insertion; opposite to this umbilical attachment, and five and a half lines distant from it, near the placental margin there was a yellow, uneven spot, as large as a square inch, resembling very much a new formation of areolar tissue. From this place other umbilical vessels take a start, so that it appears as if there existed an insertion of a second funis. Moreover two vessels, one of a red, one of a bluish hue, part from hence to join the funis of the mature child, and must be considered as communicating vessels of two umbilici with a single placenta. There existed only one common chorion, but a double amnios. This condition of things excluded therefore a superfoetation in the present instance, but the foetus had remained seven months in utero beneath its twin-sister.

A Case of Eclampsia. By MOSLER. (*Virchow's Archiv. Bd. 19, H. 3 & 4. 1860.*)—The case of eclampsia reported by Dr. Mosler presents several points of interest. A servant girl, 29 years of age, who had always been in the most perfect state of health, was delivered in her twenty-fourth year of a healthy child after a normal labor. On the 8th June, 1858, she was received into the surgical clinic of Giessen, on account of secondary syphilis. Here she gave birth to a syphilitic child, which wanted six or eight weeks of its full term of gestation; the same died when eight days old. Up to the 18th of July, viz. the twelfth day after delivery, the patient felt quite well, but on the last mentioned date she was suddenly taken with the most violent eclamptic attacks, which seized upon her every hour at first, and afterwards every half hour. She had altogether eighteen convulsions. The most scrupulous examination of the urine failed to detect the slightest trace of albumen or fibrinous casts, nor was the same diminished in quantity. The treatment resorted to, under which the patient recovered, consisted of ice applied to the head, cold ablutions of the entire body, and the administration of six grains of musk.

The occurrence of eclampsia at a time so remote from that of labor, must be counted among the most extraordinary accidents, and more especially if the absence of renal disease is taken into account. It is impossible to state what might have caused the disease in this instance, unless we conclude that the syphilis of long standing had so much altered the constitution of the blood as to render it liable to attacks of eclampsia. Moreover, this case is proof against the generally adopted opinion that eclampsia in multiparous women is a relapse of the disease occurring during the first pregnancy.

Sixteen new Observations on Eclampsia, and its Connexion with Bright's Disease. By KRASSNIG. [Wiener Spitalzeitung, Nos. 17-24, 1859.] The conclusions from the sixteen cases of eclampsia, reported by Dr. K., may be summed up as follows:—Eleven out of this number were from eighteen to twenty-five years old; five from twenty-six to thirty-eight. One case of eclampsia occurred among five hundred deliveries. Primiparæ occurred more often than multiparæ. The convulsions set in during the period of dilation of the os in ten cases; once during the operation of turning after perfect dilation of the os; five times after delivery; three times on the first, once on the second, once on the eighth day after delivery. The number of convulsions varied from one to eighty-one, the more or less advanced time of gestation or childbed showed no influence on their frequency. Only in one case was there no albumen in the urine, nor any renal disease found at the autopsy; in all the rest there existed symptoms of Bright's disease. It could be traced in one case four weeks previous to the occurrence of convulsions; in one case four days previously; and in another one hour before the attack. Oedematous infiltrations were observed ten times. Seven of the patients recovered, and nine died. Four of the former were taken during labor, three after delivery; the oedematous infiltrations disappeared promptly, and the symptoms of renal disease were removed after from four to fourteen days. Death ensued twice during a convulsion, five times during the stupor, and twice during consecutive diseases.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON SURGERY.

DR. JAMES R. WOOD, President.

RESECTION OF JOINTS.

EXSECTION OF THE HEAD OF THE FEMUR.—TWO CASES OF EXSECTION OF THE HEAD OF THE FEMUR; BY DR. SAYRE.

CASE 1.—On the 20th of March, 1854, I was called, in consultation with Dr. Throckmorton, to see Ellen G., 297 Fifth street, aged nine years, who had been suffering for eighteen months with morbus coxarius of the left hip, which was supposed to have resulted from a fall. She had been treated with issues, blisters, etc., together with the general tonic and antiscorbutic remedies adapted to such cases; but the disease continued to progress, until an abscess was discovered, involving the whole upper front and inner portion of the thigh, accompanied with repeated chills, profuse sweats, and great prostration. The leg was shortened two and a quarter inches, and turned inward, but not permanently fixed in its position (as is usual), but allowing of considerable motion, which gave a distinct *bony crepitus* between the femur and ileum. The pelvis was twisted and drawn upwards. Her general health had become much affected, having lost her appetite, and she was suffering from hectic, with constant chills and profuse sweats, and was only rendered comfortable by the constant use of anodynes.

I advised a free opening of the abscess, and, if necessary, to remove the head of the femur. At first this was objected to; but, as the child's health rapidly failed and death seemed inevitable, the father, in a few days, consented to the operation. Accordingly on the 29th of March, 1854, I proceeded to perform it. I first laid open the abscess by a free incision of about six inches, over the trochanter major, on the outer aspect of the thigh, and in a line with the femur, and then cut into the floor of the abscess (which principally occupied the inner and front portion of the thigh), and discharged about a pint of thin serous and flaky pus. The finger was then readily passed around the neck of the femur, and detected an opening in the capsular ligament on

the inner surface of the neck. The upper border of the acetabulum had been absorbed, and the head of the femur was upon the dorsum of the ileum, near the anterior superior spinous process, surrounded by its capsule (which seemed to have been slipped up), and a large deposit of bone, apparently being an attempt of Nature to make a new acetabulum. But this cavity thus formed had no lining membrane, as the femur grated roughly upon it. I then opened the capsular ligament on a line with the external incision, and disarticulated by bringing the leg strongly across the opposite thigh, and then, with a large pair of Luer's forceps, readily cut off the head of the femur at the lower extremity of the neck. The bone at this point appeared perfectly healthy. I was very cautious not to injure the insertion of the *psaos-magnus*, or *iliacus-internus*, or any of the rotator muscles, which are inserted just behind the trochanter major. The upper rim of the acetabulum had been absorbed, and the new deposit of bone, which was intended to supply its place, was denuded and carious. I gouged it off with a sharp, firm chisel, made for that purpose, and, in this way, took off a number of flakes of bone, until I came to a healthy, bleeding surface. The anterior superior spinous process on its outer surface, and the external lip of the crest of the ileum, was black and carious for some distance, and with the forceps I easily clipped it off until I came to healthy bone. Very little blood was lost in the operation, and after cleaning away all the debris, I brought the leg in a straight position, filled the wound with lint, and dressed with a roller and cold water compress. She was then put to bed, and a cup of strong coffee administered, after which she soon fell asleep. The child was under the influence of chloroform during the operation, which occupied nearly twenty minutes, and was perfectly insensible the whole time.

March 30, 10 A.M.—Passed a good night, without any narcotic, and slept about four hours; has had no chill; taken breakfast with a relish, and is surprisingly comfortable, considering the magnitude of the operation; pulse one hundred and twenty; no hemorrhage; passed urine twice. April 2.—Has passed a good night, slept six hours, ate a good breakfast, and feels every way better, but is much more feeble; dressed the wound; on removing the lint, found healthy pus in abundance. The abscess, which pointed at the anterior superior spinous process, being again full and fluctuating, I opened it, and gave exit to about a tablespoonful of tolerably healthy pus; pulse one hundred and forty, and more feeble; directed to administer brandy and beef-tea more liberally. April 5.—Child very comfortable, amusing herself by cutting paper dolls; applied the straight splint for counter extension to the well side, and made extension by means of the foot-board, bringing the limb down to the same length of the opposite one. July 1.—Dr. Throckmorton has seen the child daily since my last visit, and reapplied the bandage and compress, which has had a most salutary effect, and the abscess has the appearance of healing rapidly. July 10.—I was again called to meet Dr. T. to-day, and found the child much prostrated from a severe attack of dysentery, which had lasted four or five days; she is very much reduced, and, I fear, will not rally. The granulations are flabby, and pus thin and copious. August 1.—The dysentery has been checked for some days; but the wound, which was nearly closed, has opened, and a small piece of ragged bone came away, which was probably some portion of the shavings or chips removed from the ileum, at the time of the operation, and which I had not been sufficiently careful to remove. August 20.—The child very much improved, but the fistulous opening, from which the piece of bone had escaped, remaining, and having rather a white and flabby appearance, I injected it with tinct. iodine. August 24.—The injection has been followed by a smart attack of erysipelas, which has extended down some distance below the knee, and there is considerable constitutional disturbance. Sept. 1.—The erysipelas gradually subsided, but seems to have been of great service, as it has caused union of the walls of the

abscess all around the thigh, and the small opening in the cicatrix is nearly closed, discharging a very few drops of healthy pus. The limb is still in the extending splint; but on removing it there seemed no tendency to retraction of the limb. The splint was reapplied; but the body was left free from the bandage, so as to allow of flexion in order to prevent anchylosis. I might here mention, that for some weeks past, since about the 1st of August, at each dressing her body has been brought at a right angle with the thighs, having this object in view; and I have now permitted her to do it as often as she likes. Nov. 1st.—I had not seen the case for two months, until to-day, when, to my astonishment, I found her walking on her crutches, which she has been able to do for some two weeks. Her limb appears the same length as the other, and she can flex and rotate it freely. I directed her to bear no weight upon it yet. 20th.—To-day I placed her in the horizontal position, and measured her carefully, and find there is about one-eighth or nearly a quarter of an inch shortening. By taking hold of the foot, the whole body can be drawn down in bed without pain in the joint, and a pressure may be made sufficiently strong to move the pelvis and body upwards without producing any shortening of the limb. When she lies upon the back, with the leg extended upon the thigh, she can elevate the heel sixteen inches from the bed, and flex the knee so as to bring the thigh at a right angle with the pelvis; she can rotate it internally so as to touch the other foot, and externally so as to touch the bed. Her general health is perfect, and the case has terminated perfectly successful.

Case 2.—The operation was performed by Dr. Sayre on the 20th of October, 1859. The child, *æt.* 11, had been suffering from the disease for four years, and, not being in the hands of a regular practitioner, nothing was attempted for his relief. I found him extremely enfeebled, and attenuated to the very last degree, pulse one hundred and sixty-five, lying on his back, with legs drawn up very much, one at an angle of sixty degrees. A portion of the trochanter major was denuded. In addition to all this, there existed four or five abscesses in the vicinity, which freely communicated with the hip-joint. After a consultation, it was resolved to attempt the removal of the head of the bone. The patient was put under the influence of chloroform, and a careful examination made. The head of the bone was found to be denuded, and gave the sensation of grating against bare bone, but from the very peculiar position assumed by the limb, it was doubtful to his mind whether the acetabulum might not be perforated; but, not being able to examine it to his satisfaction, he was unable to make up his mind definitely in relation to the point. After the delay of a few days, in order to try, if possible, to get up the strength of the patient, the operation was performed, as the only chance left for saving his life. On removing the head of the bone, he found it fastened through an opening into the acetabulum, and, on withdrawing it, a large quantity of green colored, foetid pus escaped. The opening into the acetabulum corresponded in size and shape exactly with the portion of bone that occupied it, so that it formed a complete plug to prevent the escape of the confined matter; as far as the finger, passed through this opening, could reach, it was found that the internal surface of the ilium, ischium, and pubes was denuded of periosteum, and evidently in a state of caries. The periosteum, being peeled off from the surface of these bones, formed a cavity or bag for containing the pus. All the carious portions were removed by the bone-forceps, leaving almost nothing behind but the wing of the ilium. During all this operation, the periosteum and peritoneum were not interfered with, and formed the only partition between the pelvic cavity and the external world. This was done on Thursday, and the pulse, previously to the operation, was one hundred and sixty, when the child was asleep. The chloroform was administered while he was in that state, so that the child did not wake up till after the operation. The evening following the operation, the pulse fell to one hundred and twenty, and remained so

till the Sunday following, when it had decreased to one hundred and twelve. The wound was dressed for the first time, that day, and presented a very favorable appearance; it was nicely washed and injected, and strong hopes of recovery were entertained. He, however, sank and died several days after the operation. Dr. S. explained the perforation of the acetabulum, by referring to the fact that, eight months before the operation, the patient had fallen from the bed and struck upon the trochanter of that side. The head of the bone, being thus driven through, peeled off the periosteum, and formed the pocket for the pus.

BROOKLYN MEDICAL AND SURGICAL SOCIETY.

REGULAR MEETING, 4TH OF MARCH, 1860.

UNUSUAL DIFFICULTIES IN PARTURITION.—OPIUM *vs.* VERATRUM VIRIDE.

DR. BELL related a case illustrating the effect of position and presentation in causing a tedious parturition, and of unusual difficulties in efforts to relieve the case; and also as exhibiting an instance of the fulfilment of a patient's forebodings of a fatal result. The patient, in her ninth gestation, was attacked with labor pains on the 14th of February. The pains occurred with regularity, at about the usual intervals, until the night of the 16th, without dilatation of the os uteri; the uterus remaining high up, and thus rendering an accurate diagnosis of the position or presentation impracticable. About ten o'clock on the night of the 16th, pains became more efficient, the os dilated somewhat, and admitted of the detection—through the membranes—of what was supposed to be the vertex. The pains, however, were still inadequate, and, after waiting an hour longer, a twenty minim dose of Squibb's fluid extract of ergot was administered. On the recurrence of a pain about ten minutes after giving the ergot, and without any apparent increase of severity, the membranes ruptured, and the case turned out to be a shoulder presentation with prolapsus of the left arm and cord. The indication to immediately turn and deliver by the feet was found to be impracticable in consequence of the irritability and now powerful action of the uterus; the hand being resisted and rendered useless before it could be introduced sufficiently high up to get at the feet. Dr. Crane was called in consultation, and both he and Dr. Bell persisted in fruitless efforts at turning for two hours, until, finally, they gave the patient an hour's respite—with interrupted use of anæsthetics. The first effort after this was successful in reaching the feet, and delivery was accomplished. The child was recently dead, and weighed nine pounds. For two days the patient did well and appeared cheerful, though still predicting her death—from the circumstance that her mother had died at the same age, thirty-one years, and with the ninth child. She was then attacked with an insidious uterine phlebitis, without chill, which resisted all treatment, and terminated fatally on the 24th, at seven o'clock p.m. Dr. Willard Parker, of New York, and Dr. C. L. Mitchell were both called in consultation during the progress of the case. The treatment at first consisted in the free administration of opiates, and subsequently veratrum viride, in addition to these. A prominent point in the treatment was the failure of veratrum viride to produce its characteristic effect upon the pulse, and it became a question as to whether this failure was due to the character of the disease, or to the association of the remedy with opiates.—Discussion upon this point showed it to be probable that opiates were really, as had been previously stated, antagonistic and antidotal to the veratrum viride, but that they did seem to be efficient in combination at times. Had the veratrum viride been used alone, however, it did not seem probable that it could be successful in such diseases as phlebitis, where the blood was poisoned to such an extent.

The effect of combining the veratrum viride with opium was rendered still more prominent by another case reported by Dr. Bell, occurring nearly at the same time. A young woman, in her first labor, at full term, was successfully delivered of twins, on the 19th of February, without unusual circumstances. On the 22d, the nurse imprudently had the patient up, and on the next day she was taken with chill, followed by metritis. This case was at first treated by veratrum viride in combination with opiates, and the pulse was measurably controlled—from one hundred and sixty to one hundred and forty, and to one hundred and thirty-six. This was so unsatisfactory that at the end of two days the opiate was left out, and the veratrum viride used alone. The pulse was then speedily reduced to ninety-two, when nausea supervened and the remedy had to be discontinued. The pulse gradually rose again to one hundred and thirty, when the veratrum viride was resumed, and it acted as before—reducing the pulse to sixty, yet the disease did not yield. The pulse again rose, opiates were resorted to, and convalescence was soon after established. Upon the admission that opium and veratrum viride could not be used together with advantage, an interesting question arose as to which should have the preference in cases of uterine phlebitis. Discussion seemed to warrant the conclusion that, in the majority of cases, opium is to be preferred.

Correspondence.

ETHER AND CHLOROFORM.

[To the Editor of the American Medical Times.]

SIR:—In your leader of the *Medical Times*, for August 18, upon the interesting subject of Anæsthetics, when speaking of the comparative merit of chloroform and ether, you refer to the latest statistics published in Europe; and out of a total of one hundred and twenty-five fatal cases by anæsthesia, recorded in the practice of that part of the world, you give twenty-five deaths as having occurred during the inhalation of the ether.

As experience in this country, the birthplace of ether, seems to be more favorable to the innocuous character of this agent, which is besides more extensively used here than in Europe, would you favor your readers with the source and analysis of the cases tabulated in the statistics above referred to? By so doing you will also oblige

A SUBSCRIBER.

August 24, 1860.

[The statistics referred to in the editorial article of August 18, are embraced in the following communication of Dr. CHARLES KIDD, published in the *London Medical Times and Gazette*, of May 12, 1860.—Ed.]

"The following tables are the result of a suggestion made to me by one of our most eminent Hospital Surgeons, my friend Mr. Paget, who having done me the favor recently to read my little book on Chloroform, expressed a wish that I would 'compare the number of deaths after small and after great operations, to see whether the proportion of their several numbers be different from that of their several chloroform mortalities.' And, Mr. Paget adds, 'your records would easily decide the question, and it is important to do so.' I had said (p. 63) which Mr. Paget doubted, that patients bear large operations under chloroform best; that operations on sphincters, and tendinous sheaths about the fingers and toes (p. 192) were probably to be regarded with more dread under chloroform than the largest amputation, or such a terrible operation as ovariectomy. I may say here that Professor Murphy, also, who has seen a great deal of chloroform in general as well as in obstetric practice, was also struck by the same apparent anomaly, and wrote

to me to say that it would require very rigorous examination before it could be received as a general law or a fact, that deaths from chloroform are more frequent from small doses, and in trivial operations, rather than where large quantities of chloroform had been taken. All I can now say is, that, however it is to be explained, there is no longer any doubt on the matter whatever, as any one may convince himself from an inspection of the following tables drawn up with some care.

"There have been about one hundred and twenty-five deaths from anæsthetics in Europe up to the present date. A very large number, the only list of any such cases on the Continent, is one by M. Scoutetten, an Army Surgeon, who gives forty deaths, but unfortunately does not specify the nature of the operation for which the anæsthetic was administered. Dr. Snow gives fifty deaths, and I have since myself made out thirty-five deaths in addition. All agree as to the vast preponderance, however, of deaths in male patients rather than in females; it also appears that while there have been in reality no deaths as the result of large amputations, resections, ovariectomy, etc., fully two-thirds of the deaths have been from operations on sphincters or tendinous sheaths, strabismus, tooth-drawing, etc.

Nature of Operation causing Death.	Snow.	Kidd.
17 Deaths during operations on fistule, hæmorrhoids, application of caustics, etc.	13	4
14 Deaths in removal of toe-nail, dead finger, and such operations on phalanges.	9	5
10 Dentists' cases of tooth-drawing, etc.	6	4
11 Deaths from removal of tumors.	7	4
Resections, large amputations, midwifery, ovariectomy, ligatures of large arteries, etc.	—	—
9 Deaths in minor amputations (but 6 occurring before the operation commenced)	4	5
6 Deaths in strabismus, operations on eye, etc., cysts of eyelids, etc.	2	4
9 Deaths in operations on testis, sounding, etc. (3 included doubtful in 318 lithotomy cases)	6	3
5 Deaths from reduction of dislocations.	2	3
1 Death from strangulated hernia.	1	—
8 Deaths from delirium tremens.	—	3
	50	35
Scoutetten's cases (not specified)	40	

"This table explains itself; the general result is very curious, and I think very convincing, that in hundreds of thousands of operations where chloroform has now been used, it has proved in the vast majority to be perfectly safe, and that it is safer in large than in small operations. Why it is so, I may not now stop to inquire. Again, of sixteen deaths under chloroform, where I was myself able to trace out the probable cause of the fatal issue, I found three where some remote disease of the heart might be suspected; but in thirteen there had been probable, and in some very serious derangement of the nervous system—viz. three deaths from delirium tremens and chloroform combined, two where chorea and meningitis were present, two from cysts in the brain, and four from other lesions of cerebral tissue. It seems too evident, I think, that if syncope or 'fit' should occur in any such case, resuscitation is rendered difficult, as we have an imperfect brain and spinal apparatus to work with. Disease of the heart is a very rare cause of death from chloroform; the facts on which this hypothesis was built up are now shown to be all erroneous.

"Some other remarkable facts have been discovered during the course of these investigations, as to death from chloroform, which it is of interest to note. First, that a very large number of the twenty-five deaths from the use of anæsthetics after operations have been deaths from the effects of the slow administration of ether, or ether and chloroform mixed, but not from pure chloroform. I published nineteen deaths from ether two years ago, yet it is still suggested in America that there have been no deaths from this agent. Scoutetten gives five; and since then there have been at least four or five more from ether or amylene; so that, on the whole, there appears at present

about a hundred deaths from pure chloroform, and one-fourth (or twenty-five) from ether or amylene! Next, as to the stage or degree of the anæsthetic process which appears most dangerous, this (contradictory though it seems) is decidedly the stage of excitement, or the early stage of violent plunging, before the patient is rendered anæsthetic and fit for the operation he is about to undergo. This escaped the knowledge of Dr. Snow.

	Snow.	Scutcheon.	Kidd.	Total.
In 121 deaths, the relative dangers of the chloroform "Stages" were:—				
Deaths when chloroform was given for intended operations, or immediately before operations	18	22	14	54
Deaths during the progress of operations	23	6	14	43
Deaths after operations—i. e. from chloroform immediately after, or the result of chloroform and the operation combined a short time after the operation had been completed	6	12	7	25
In 188 deaths, the relative frequency of deaths as to Sex was:—				
Males	80	82	93	90
Females	20	16	7	43

"I only say, in conclusion, that I look on this suggestion of Mr. Paget as very valuable, and these results as most unexpected."

RESUSCITATION FROM ASPHYXIA FROM CHLOROFORM AND OPIUM.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR: In your issue for August 25, Dr. May, of Corning, N. Y., has reported a case of resuscitation from *chloro-asphyxia* by repeated affusions of cold water upon the chest, and also alluded to the successful effect of the same application in a case of opium poisoning. Permit me to call your attention to what I think is an improvement upon the method pursued by him, which I put in practice in the New York Hospital on a *laudanum* case. The man had taken two ounces, and in a short time after the pupils became greatly contracted, and the patient stupid and comatose, so that he could not be roused or kept awake by any ordinary means. The stomach pump was useless on account of food blocking up the tube—emetics would not operate—flagellation, severely applied, failed of any effect, and although in an hour or two after admission he took three or four ounces of brandy, he soon after was unable to swallow, the pupils became as small as a pin's head, the respirations almost entirely ceased, and the pulse was fluctuating from 112 to 130. The case was therefore hopeless, unless some extraordinary means were employed to restore and maintain respiration. Abandoning everything else, I called for two pails of water, one cold, into which a large piece of ice was plunged, and the other of water as hot as could be drawn from the bath-room. The patient was stripped naked and laid upon the floor on his back, and then with a large syringe, alternate discharges of hot and cold water were forcibly thrown upon his face, chest, and abdomen. The effect was admirable; deep inspirations were produced by almost every discharge from the syringe, but especially when one of ice water immediately followed one of hot water; the shock being much greater by the contrast.

One important advantage derived from the use of the hot water (besides rendering the impression by the cold water more effective) is the *preservation of the heat of the body*, which, by the use of cold water alone, must be greatly reduced, and the restorative process be consequently retarded. The forced respiration was maintained with perfect ease by this means, and in a few hours it was carried on spontaneously seven or eight per minute, and the pulse fell to 90.

It soon became re-established at its normal rate, so that the patient was in two days discharged cured.

The syringe was, of course, not a necessary, though a very convenient instrument—a pitcher or a cup would, doubtless, answer nearly or quite as well.

JOHN H. GRISCOM, M.D.

42 E. 29th Street, Aug. 27, 1880.

DOMESTIC CORRESPONDENCE.

PHILADELPHIA.

August 27, 1880.

At this season there is little of medical interest occurring in the city. Medical teaching is having its vacation, the societies do not generally meet, the medical clubs do not entertain, and very many of the distinguished names in the profession may now be found registered "on the books" at the most popular watering places. Yet the season is sufficiently advanced to present some premonitory symptoms of the approaching medical revival, as is evinced by the posting up on the bulletin-boards at the hospitals and colleges of some bright new cards and circulars of the numerous private teachers who make a winter harvest among the throng of students.

The colleges will, for the first time, commence their sessions with each but a single introductory lecture to its course. It is not yet announced which member of its faculty each college has chosen to deliver the general exordium to its course. The faculties remain the same, with the exception of Dr. Pepper's succession to the place of Dr. Wood in the University. Dr. Pepper steps into a position made eminent by a line of distinguished predecessors, and his initiative effort on the college forum will be critically scrutinized. If his merit is to be decided by a comparison with the last honored incumbent of the post, it will be a severe test.

The summer classes of the private teachers and hospitals have been unprecedentedly large, particularly at the old Pennsylvania Hospital. At that institution a most extraordinary array of operative cases has been presented during the summer service of Dr. Pancoast; among them was an amputation at the hip-joint in a young man, performed in the presence of the Japanese physicians; the patient—or, rather the remaining three quarters of him—has left the wards in good health.

A few students have continued to find their way during the warm weather across the river to the Philadelphia Hospital, where an enormous collection of cases, some acute, but more chronic, is displayed. At that hospital Dr. Levis has been relieving the monotony of the treatment of some among the hundreds of ulcerated legs in the wards, by subcutaneous ligation of varicose veins with silver wire, and all thus treated, it is claimed, have been cured.

The Episcopal Hospital, which is located in an extensive manufacturing district of the city, has, during the summer, had its limited accommodations filled to repletion. The new building for this institution is progressing. The edifice will be large, and in the most approved hospital architecture. The pavilion style has been adopted. The Episcopal Hospital exists under similar influences to your St. Luke's. It occupies a very respectable position among the hospitals of the city, and, in a surgical way, is a good field. The operation of ligating the subclavian was recently performed in its wards by Dr. Drayton.

The St. Joseph's Hospital (Catholic) is being almost rebuilt, and when completed, will be much more commodious than formerly.

The effort to establish a German hospital in this city has not taken a very substantial character, although much influence was exerted, and a considerable fund raised for the purpose. The German practitioners among us seem not very harmonious with each other, and some who lead in this hospital movement are not popular in the profession.

In a literary way nothing remarkable has recently been

developed, but there are believed to be some important conceptions undergoing incubation. Dr. J. A. Meigs is, it is said, producing a full text-book on physiology. Dr. H. Hartshorne's work for students, on some subjects connected with the practice of medicine, the title of which we have not heard, is soon to appear, and it is hinted that Dr. Gross is again at work at book-making.

The change in the periodicity of the *Journal*, from a bi-monthly to the hebdomadal issue, has been favorably received here; its new form will certainly be popular. In Philadelphia, as in European cities, weekly journalism is considered a highly important field.

Φιλαδέλφεια.

Medical News.

DEATHS.

WEBB.—On the 31st of July last, at Brooklyn, N. Y., DR. EDWIN WEBB, JR., aged 20 years, 11 months, and 22 days. The deceased had passed his examination for the degree of M.D., in the Medical Department of the University of the City of New York—but wanting a few days of his majority, had not received its honors. He entered the Brooklyn City Hospital, temporarily, as Resident Physician, only the day before he sickened (July 16th) with peritonitis. As a student he bade fair to do honor to the profession of his choice.

CORRECTION.—The appointment of Curator at the New York Hospital has not yet been made.

ERRATA.—In Dr. Riggs's article, last number, the following occur:—p. 130, 2nd column, 3rd line from top, for *readily*, read *scarcely*; p. 131, 2nd column, 8th line from bottom, for *original*, read *inguinal*; p. 132, 1st column, 9th line from top, for *original*, read *inguinal*; p. 133, 1st column, 15th line from top, for *pressure*, read *presence*.

A morning paper asserts that a new Chair has been established in Amherst College, entitled, "*Professorship of Hygiene and Muscular Development*," or something of the sort," the first incumbent being Dr. JOHN W. HOOKER, son of Prof. Worthington Hooker, M.D., of the Yale Faculty.

THE NEW YORK MEDICAL COLLEGE has at length reorganized with the following Faculty:—Robt. Ogden Doremus, M.D., Professor of Medical Chemistry; John Murray Carnochan, M.D., Professor of Clinical and Operative Surgery; D. Meredith Reese, M.D., Professor of Theory and Practice of Medicine; A. K. Gardner, M.D., Professor of Clinical Midwifery and Diseases of Females; B. J. Raphael, M.D., Professor of Principles and Practice of Surgery and Surgical Pathology; John O. Bronson, M. D., Professor of Anatomy; Charles A. Budd, M.D., Professor of Obstetrics and Therapeutics; A. Jacobi, M.D., Professor of Infantile Pathology and Therapeutics; Bern L. Budd, M.D., Professor of Toxicology.

NEW METHOD OF VENTILATION.—In arranging his plans for ventilation, McKinnell takes advantage of two simple and well-known facts. If an aperture is made, or a shaft carried through the ceiling of any room, or roof of any building, two currents of air are at once established; and these two currents, instead of jostling each other with human perversity, pass uniformly in definite courses according to fixed laws. The centre of the opening is occupied by an out-draught of the warm exhausted air of the building, while the sides are lined with an insinuating current of the colder and purer atmosphere. One shifting column of air is contained within the other, and the two have a relative movement somewhat like that of the pieces of a telescope. Any one may illustrate this fact of the regular self-inclosed movements of fluids, of differing temperatures and densities, by warming a little water

suspending a few floating colored particles, in a test-tube, over a spirit lamp. Directly the heat is applied, the colored matter will indicate the presence of two opposite currents, in the positions and directions just mentioned. McKinnell carries two funnels or shafts, of different sizes and lengths, through the roof of the building he wishes to ventilate. The smaller and longer tube is placed in the centre of the larger one, and thus the two currents of air naturally seeking to pass into and out of the apartment, are separated one from the other; and this concentric arrangement of the two tubes is so devised that the capacity of the central tube shall be equal to the annular space inclosed between its outer circumference and the inner aspect of the external concentric tube. The lower end of the inner tube is movable, and has an expanding mouthpiece or flange. This trumpet-shaped expansion serves two purposes; if drawn down away from the outer tube, it spreads the incoming cold air over the upper part of the room, and so causes its descent to be more uniform and dispersed; it may also, by being raised to the level of the inner opening of the outer tube, be made to act as a valve shutting out altogether the external air, or limiting the currents to the area of the central tube.—*Medical Times and Gazette*.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 18th day of August to the 25th day of August, 1880.

Deaths.—Men, 79; women, 80; boys, 189; girls, 200—total, 548. Adults, 159; youths, 36; children, 364; males, 363; females, 280; colored, 9. Among the causes of death we notice:—cholera-infantum, 123; congestion of the brain, 11; infantile convulsions, 43; croup, 8; diarrhoea, 18; dysentery, 7; scarlet fever, 22; typhus and typhoid fevers, 10; inflammation of brain, 11; of lungs, 15; of stomach, 5; measles, 7; small-pox, 14; consumption, 46; droopy of head, 21; infantile marasmus, 49. Classification:—brain and nervous system, 116; respiratory, 83; digestive, 223.

The number of deaths compared with the corresponding weeks of 1880 and 1879, and of last week, was as follows:—

Week ending August 23, 1880.....	657	Decrease....	108
" " August 27, 1879.....	683	" " ".....	88
" " August 18, 1880.....	473	Increase....	76

JULY. and Aug.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General di- rection of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	°	°	°	"	"			
19th.	29.80	.18	79	70	86	8	14	SE.	5	
20th.	30.00	.04	76	73	80	4	5	SE.	5	.4
21st.	29.97	.04	77	72	82	4	6	SE.	5	
22d.	29.95	.02	77	71	84	5	8.8	SE.	8.5	1.8
23rd.	29.84	.02	78	71	83	6	10	SE.	5	
24th.	29.86	.18	76	70	81	6	8	SE.	5	1.8
25th.	29.71	.18	76	70	82	7	10	NE. W.	5	.6

REMARKS ON THE WEATHER.—The whole week was sultry, and the force of the wind very light, or calm. A tempest of wind and rain prevailed at intervals from 10 P.M. to 2 A.M. of the 21st and 23d; another similar storm broke early A.M. on the 23rd, and another heavy rain occurred between 4 and 6 A.M. on the 25th.

MEDICAL DIARY OF THE WEEK.

Monday, Sept. 3.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Taylor, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Sept. 4.	{ CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
Wednesday, Sept. 4.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Meir, half-past 1 P.M. ACADEMY OF MEDICINE, 8 P.M.
Thursday, Sept. 5.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Thomas, 12 M.
Friday, Sept. 6.	{ CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Sept. 7.	{ BELLEVUE, Surgery, Dr. Mott, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.

Original Lectures.

CLINICAL LECTURE.

DELIVERED AT THE NEW YORK HOSPITAL,

BY

H. D. BULKLEY, M.D.,

ATTENDING PHYSICIAN.

SINCE my remarks to you on the subject of dropsy as a symptom of different forms of disease, Gentlemen, we have had in our wards two other cases belonging to the same class, one a case of ascites, connected with enlargement of the liver, making a second case of this disease under treatment, and another a case of albuminuria—respecting the dropsical part of each of which I wish to say a word.

ASCITES.—ALBUMINURIA.

I would first remark, in connexion with the cases which made the basis of our former lecture, that in one of them—that in which there was effusion into the upper extremity on the right side, and afterwards on the left side, and which presented symptoms indicating obstruction of some kind to return of blood to the right side of the heart—the change of diuretic from the acetate of potash, with infusion of buchu, to a decoction prepared from seneka, squilla, and juniper berries, and the sweet spirits of nitre, was followed so soon by marked increase in the quantity of urine discharged, as to be fairly attributable to this change, as we supposed it to have been in the case of ascites formerly mentioned. In that case, in which the quantity of urine passed on the 1st July was sixteen ounces in twenty-four hours, and which at first increased to thirty-six ounces under the use of the acetate of potash and buchu, with rest in the hospital, and then sank to twenty-four ounces in twenty-four hours for five successive days, on the 21st of July reached fifty-six ounces, and on the 24th reached sixty-eight ounces in twenty-four hours. This is the case in which you will perhaps recollect that I gave pills of blue pill, squilla, and digitalis, for the three or four days, but which I was obliged to suspend in consequence of too great action upon the bowels, and in which for one day we had a report of only eight ounces in twenty-four hours, owing partly to the abundant discharges from the bowels, and partly, doubtless, to the difficulty of measuring the urine while such catharsis was going on. The question may very properly be asked, Whether this action upon the bowels, and especially the unloading the liver by means of the blue pill, may not have prepared the way for the increased action of this diuretic? The short time during which the pills were taken, and the decided action upon the bowels, would seem to point to the blue pill rather than to the digitalis as the cause, if it were owing to either, of the increased diuresis which has since taken place. In the other case, that of ascites, a similar increase has already been mentioned as having been produced by the change of diuretics alluded to, and I will now only add that this increased rate of discharge continues under the use of the same means. You will remember that the combination which produced this increased action in both cases, consists of articles which come under the head of Dr. Golding Bird's *special diuretics*.

In the case of ascites with enlargement of the liver, which was in a man of intemperate habits, a barkeeper by occupation, whose disease was evidently connected with the abuse of alcoholic stimulants, a remarkable increase in the quantity of urine passed took place within two days, simply from a change of habits, keeping him at rest in a recumbent position and without any medicine of any kind, forty ounces having been passed in twenty-four hours the day after he

entered the hospital, and seventy-two ounces in twenty-four hours on the following day, showing the necessity of caution in attributing to remedies what may sometimes at least be due to other causes. This case is one of interest in other points of view, and I shall probably return to a consideration of it at some future time, and only allude to it now in connexion with the dropsical feature in it.

I wish, in this connexion, to say a word respecting the dropsical effusion in the two cases of albuminuria now in our wards, which present some points of contrast, and also afford some confirmation of the value of the microscope for the purpose of prognosis in that disease. To the first of these cases, I made brief allusion on a former occasion. The patient, a stout Irish laborer, thirty-eight years of age, who entered the hospital on the 14th of July last, had first noticed a swelling of his feet and ankles about five weeks before, which was followed soon after by swelling in the face, and accompanied with a scanty secretion of urine. When first seen, the face, and legs, and thighs were very much distended with fluid, and the scrotum was very much enlarged from the same cause, and he presented a characteristic specimen of that puffy and doughy appearance associated in the minds of all with Bright's disease. He was passing about forty ounces of urine in twenty-four hours, of a reddish tinge, and highly charged with albumen. The microscopical examination, however, showed but few casts, and none containing oil, and consequently pointed to an acute form of the disease. Under the use of the hot air bath, with spiritus mindereri, and the infusion of buchu, and acetate of potash, which was subsequently changed to the diuretic decoction containing squilla, seneka, etc., formerly alluded to, the quantity of urine gradually increased, until it averaged about sixty ounces in twenty-four hours, and now, at the close of the month, the swelling has very much subsided, the face has become almost natural in appearance, and he feels in every respect much improved. It is proper to say that he was put under the use of the tincture of muriate of iron a short time after his admission.

The other case of albuminuria is that of a man, also a sailor, a native of New York, thirty-seven years of age, who entered the hospital on the 18th inst. He had always considered himself a healthy man, until only about eight days ago, when he noticed that his feet and legs were beginning to swell, and that his urine had become scanty and high colored, and that he had more frequent calls to pass it than before. There had never been any swelling of the face. The register of water passed showed only eight ounces the first twenty-four hours. The face had somewhat of a waxy appearance, but was not in the least puffy, and the swelling of the feet and ankles was quite moderate. The urine was of high specific gravity, and was heavily loaded with albumen, and also with the urates. He was put under the use of the hot air bath, with the spiritus mindereri and ipecac internally, to which was soon added the acetate of potash and buchu, as a diuretic, and in a few days afterwards the tincture of muriate of iron. Under the use of these means (the same as those so effectual in the other case), the quantity of urine increased in a day or two to twenty ounces in twenty-four hours, beyond which it has but slightly increased during the last eleven days, having only twice reached twenty-four ounces, and once twenty-nine ounces; while, on one of the days, it fell to sixteen ounces. During this time the dropsical effusion has been slowly but regularly making progress until now, the legs and scrotum have become very much distended, and even the cellular tissue in the upper part of the thighs and about the hips has become much infiltrated, and pits on pressure. With this increase of dropsical effusion, there has been considerable failure in the vital powers, and his complexion is more pallid than before. Now why this difference in the two cases? The microscope shows in this case a great abundance of casts, loaded with oil globules, which could lead us to a much more unfavorable prognosis in this than in the former case, notwithstanding the much more favorable early history of the latter.

PERICARDITIS.

The case now before us is one which illustrates several practical points connected with pericarditis, under which the patient is still laboring, and is one which caused me no little uneasiness when I first saw it, which was eleven days ago, when I commenced my term of service here. He is an Irish boy, nineteen years of age, a shoemaker by trade, apparently of healthy constitution, who has had rheumatism, and also pneumonia and pericarditis, and pleuritis, and who had an exacerbation of symptoms of pericarditis when I took charge of him. He was then very pale, laboring under dyspnoea, amounting almost to orthopnoea, with an anxious countenance, and a pulse of about one hundred and fifty, and very quick as well as quite feeble. There was no swelling or pain in the joints. There was decided fulness over the præcordial region, over which dullness on percussion extended to the sternum, and at least four inches to the left from it, and also upwards beyond the normal limit, though the exact extent was not noted at the time. The sounds of the heart were very indistinct, and could hardly be distinguished from each other. No friction sounds could be heard, nor any valvular sounds. There was moderate dullness on percussion over the left side of the chest posteriorly, and subcrepital râle over the same region. The physical signs then, which are by far the most important in the diagnosis of a case of pericarditis, pointed to a case of that disease with effusion, and which had evidently been much increased since the day before, as shown by the more urgent rational signs, and by the disappearance of a friction sound which I was informed had been well marked previously. The practical question as to the treatment was an important one. If prescribed for according to its name, leeching, cupping, and perhaps even venesection might pass before the mind in connexion with the teachings of the books respecting this disease. But the time for antiphlogistic means had passed, if it had ever existed, and here I would caution you, in passing, against being influenced by the name of a disease in your treatment of it. The next point passed in review in such a case would be the propriety of a mercurial course. This idea would probably be discarded by some, who would recommend opium to allay the excessive irritation of the heart, while others would recommend the exhibition of these two agents in combination. I preferred to use neither of these remedies in such high repute in this disease, and which doubtless are valuable agents in some forms and stages of it, but directed iodide of potassium in ten grain doses, every six hours, and a sinapium over the left side of the chest, both anteriorly and posteriorly. The object of giving this remedy, now so popular for so many, and indeed most varied diseases, was to act as a diuretic, in the hope of relieving the effusion, which I supposed to be passive in its character, and to the increase of which I attributed the great aggravation of his symptoms within the last few hours. I was gratified to find marked improvement on the following day, which improvement has been gradually progressing until now, when his changed countenance, lighted up with a smile, his comparatively tranquil breathing, and his pulse diminished in frequency, present a marked contrast with what then existed. Under the use of this remedy, there was an evident increase in the quantity of urine; and, corresponding with the change in his general condition, was a return of friction sounds over the præcordial region, which had disappeared under the increased effusion. These are now less than they were, and the sounds of the heart seem perfectly clear and normal, showing, if we hear correctly, that the heart itself has escaped injury, notwithstanding the danger to which it has been exposed. Three or four days ago, I directed the citrate of iron to be combined with the iodide of potassium. This is often a very important, and sometimes a necessary auxiliary in restoring the healthy condition of the blood during convalescence from rheumatism, as well as other diseases, and thus counteracting the effect of the two depressing causes which have been in operation, which causes

are found both in the disease itself and in the remedies used to control it.

RHEUMATIC FEVER.

The case just exhibited presents you a palpable instance of the local mischief produced by the rheumatic poison, for such is the epithet applied by modern pathologists to that peculiar morbid material circulating through the system which gives rise to those symptoms known under the name of rheumatism. I now show you a case in which we have marked constitutional disturbance, with but moderate and only transient local difficulty. This patient, a native of England, a druggist, twenty-one years of age, was admitted into the hospital on the 3d inst., with high febrile excitement, and profuse perspiration, and with such a slight amount of pain in the joints as to attract no special attention at the time. Indeed, the febrile condition was so far the predominating feature of the case, that it was at first watched with reference to the type of the fever, a suspicion having at first arisen in the mind of the resident physician that it was periodic. A careful watching, however, showed an absence of any exacerbation or remission, and the continued type of the fever was soon beyond doubt. It now, however, led our thoughts in a different direction, a tendency to redness about the edges and tip of the tongue, with slight dryness of it, leading us to watch lest it might partake of a typhoid character. With this continued frequency of the pulse, and suspicious appearance of the tongue, there was profuse perspiration over the whole of the body and limbs, and with this a most abundant crop of miliar eruption. Litmus paper showed the perspiration to be decidedly acid, which was also markedly the character of the urine. Attention was called about this time to the joints, which were slightly swollen, more especially the wrists and ankles, but not so as to interfere with their use. An early diagnosis of the case as one of rheumatic fever had led to the usual treatment of this disease with us, the free use of Rochelle salts, which was given in half drachm doses every three hours. Under this treatment, and this alone, he had been slowly but gradually improving, the urine having become alkaline at one time under its use, but afterwards becoming acid again, though only temporarily, the fever slowly diminishing, the profuse perspiration ceasing, the pains in the joints nearly gone, and his condition altogether quite comfortable. The sounds of the heart have continued natural during the whole time. This case illustrates the important practical point, that in rheumatism, the fever is the only constant fact, the pains varying very much in their nature and severity, and changing their location often when they do occur, sometimes attacking the joints, and afterwards the membranes of the heart, and at other times attacking that vital organ at first, without showing its effects anywhere else.

PARAPLEGIA.

The patient now before us has just entered the Hospital, and we will investigate his case. He is a native of Ireland, 27 years of age, a seafaring man, and has recently been a steward on board of an ocean steamer. Some three or four months ago he experienced hardships and exposure from having been wrecked, and afterwards exposed to wet and cold in scrubbing the deck of the vessel, and in other ways; and also suffered much mental anxiety about the same time. Soon after this he was attacked with pain in the back between the scapulae, and also severe pain, with a feeling of constriction across the lower part of the chest and upper part of the abdomen, as though bound tightly across those parts with a cord, for which he entered an hospital at Havre. He was told that it was rheumatic, and that it would pass downwards and thus pass off. These feelings partially subsided, when he began to experience a sense of numbness of the lower extremities, and found that he was beginning to lose the use of them. The sensation in the limbs returned, but the loss of power gradually increased,

though he was still able to walk about, when he entered the hospital in Charleston, S. C., a fortnight ago; soon after which he lost the use of them entirely, and could not even stand upon them. While there he was repeatedly blistered on the lower half of the back, and also along the limbs, and also had galvanism applied, and probably, also, took strychnine, as he says that he took something which caused violent twitching and jerking of his legs. But he continued to grow worse instead of better, until the paralysis extended to both the rectum and the bladder.

He says that he has always been a healthy man, with the exception of having an attack of fever while within the tropics two and a half years ago, and a gonorrhoea four years ago, which produced a stricture of the urethra, from which he still suffers. He never had syphilis.

As now before us, you will see that he is entirely unable to move his lower limbs, not even to draw them up, as he lies upon the bed; sensation in them is normal, and reflex action is unimpaired. He has a constant burning sensation in the soles of the feet. Discharges from both bladder and rectum take place involuntarily. He has never had any pain in his head, and his mind is entirely unaffected. He still feels a sense of constriction across the lower part of the chest and upper part of the abdomen; there is, also, pain on pressure over the lower dorsal and the whole of the lumbar vertebrae; but it is possible that some of the pain thus produced may be owing to tenderness caused by the repeated blistering to which he has been subjected. His pulse is 88, rather small, but regular; tongue clean, appetite good, bowels open. He suffers somewhat, at times, from pains and spasmodic twitchings of the limbs, but much less than often occurs in more advanced cases of this affection.

You have, then, a well characterized, and, indeed, a model case of paraplegia, or paralysis of the lower extremities, a disease almost exclusively dependent upon some affection of the spinal cord or its appendages. The cause, exposure to wet and cold, is one of the most common of those producing the disease, and sometimes develops it in those who stand in the water for hours at work. It is also sometimes produced by sleeping on the damp ground, and sometimes by sleeping exposed to the night air.

A characteristic and almost pathognomonic symptom is the peculiar pain, with a sense of constriction across the lower part of the chest and upper part of the abdomen, so well marked in this case, which is sometimes mistaken for rheumatism, as it was in the present instance, and which I have known mistaken for pleurisy. You notice that the sensibility of the lower extremities continues normal, but that there is entire loss of voluntary motion, and that the paralysis has extended to the sphincters of the rectum and bladder, and that he is unable to retain the contents of either. There is pain in the back, and tenderness on pressure over several of the dorsal and lumbar vertebrae, and he still complains of the severe pain radiating from the spinal column and extending across the front part of the abdomen. His general health has begun to suffer from the irritation of the disease and from the confinement. He has lost flesh, is anæmic, and has a frequent and feeble pulse. The progress of the disease seems not to have been at all affected by any of the remedial means used, but to have been constantly onward. Different views have been taken of the pathology of this affection, and it is doubtless true that the nature of the lesion differs in different cases. It is sometimes owing to thickening of the investing membrane of the spinal cord, and sometimes to inflammation of the spinal cord itself; and when the latter lesion exists, sometimes softening of the cord, and at other times induration follows, each of which is attended by its own more or less characteristic symptoms. They are always unpromising cases, especially when they have already lasted so long without amelioration by remedies. Without detaining you with the discussion of the different remedial means recommended, which may, perhaps, furnish the subject for future remarks, I will say that I shall try in the present case the effect of a mild mercurial course, and therefore give him the proto-iodide

of mercury in half grain doses, combined with one grain of extract of conium, night and morning, leaving him without any counter-irritation at present. I shall give him nourishing but unstimulating diet at present, but if he grows more feeble, shall give him tonics and stimulants. I wish to mention one caution of a practical nature connected with this disease, suggested by a case of it in our wards last year. The patient, an adult male, had constant dribbling away of urine, and it had been taken for granted by the physician in the city under whose care he had been for three weeks, that the bladder had been fully evacuated from day to day; but on percussion over that region, it was found very much distended, and a large quantity of strong smelling, highly colored urine was drawn off by the catheter. Another still more unfortunate instance of neglect in that case, which should also serve as a warning in similar cases, was that the urine, which had been constantly dribbling away for so long a time, had produced inflammation and excoriation of the skin on the inside of the thighs, and had also given rise to large and foul bed sores over the sacrum and one of the trochanters, a condition very apt to happen when parts are constantly exposed to such an irritating cause in a system weakened by disease, and by long confinement to one portion and aided by the continued pressure by the weight of the body. Dribbling away of urine should always lead to a careful examination of the state of the bladder, and to an evacuation of its contents, if distended. In the present case, the bladder was found to be nearly empty.

Original Communications.

HISTORY OF A CASE OF THE DRACUNCULUS OR GUINEA WORM (FILARIA MEDINENSIS).

TREATED AT THE SEAMEN'S RETREAT, S. I.

BY C. E. SEVERANCE, M.D.,

HOUSE PHYSICIAN.

JAS. H. HARVEY, nativity, N. Y.; aged 32 years, was admitted into the Hospital, June 11, 1860. The right ankle was considerably swollen, extending on the external side nearly to the knee, quite dark colored, and attended with intolerable itching throughout the day. From six or seven o'clock in the evening until daylight he was every night kept awake, and sometimes almost frantic, from the jerking pain, as he expressed it, which seemed as though the bone was being gnawed off.

About four weeks previous to admission, while "before the mast" *en route* from New Orleans to New York, he first observed a swelling, which commenced below the external malleolus, attended with slight itching, which gradually increased and extended. June 17th, about two inches above the malleolus, a vesicle was punctured at the apex of what appeared to be a boil, when with the semi-transparent serous discharge, in quantity perhaps half a drachm, a dracunculus was observed, a loop of which protruded fully an inch. This was the sole cause of all his trouble. Dr. Livingstone's method was immediately resorted to, which is the roller compress and adhesive straps, and in forty-eight hours the head together with half a yard of the body was extracted. The patient being alone when the head appeared, was anxious to remove it himself, but making too great traction, he broke the body at the puncture, leaving a portion of unknown length hidden in the tissues. Inflammation and pain followed, increasing for several days. Lines of livid red, one-fourth of an inch wide, extended around and across the leg, and half the distance from the knee to the hip. These gradually subsided, and the swelling and pain diminished day by day; and, after considerable suppuration,

the wound healed. August 1st, the patient was discharged cured.

The dracunculus, of the class entozoa, and species *filaria medinensis*, is of that division in which is found a distinct intestinal canal, orifices at both ends, and traces of a nervous and muscular system. It is confined to tropical localities; seldom more than three yards long; and is found of diminished length according to its age. The female only has been discovered, which resembles a flattened cord one line in diameter, of a yellowish color. The head is round, a little larger than the body, and armed with four straight pointed spines, by which it probably penetrates the tissues. It is found in the subcutaneous areolar tissue, chiefly of the ankles, feet, and legs; very seldom in the abdominal parietes or arms. Sometimes it appears as an endemic, attacking certain regiments in armies and sparing others.

Dr. Livingstone believes it mostly inhabits low marshy districts, following the rainy seasons; that other animals become infected only by coming in actual contact with it; hence the natives of Africa guard against wetting their feet, bathing in standing pools, or sleeping on the ground. As many as fifty have been found in one person; more than one, however, seldom occurs. It is viviparous, and the young are supposed to be impregnated before entering the flesh of other animals, and after attaining their full development attempt an escape to their native soil in which to deposit the germs, where the male constantly remains. When it is superficially situated its growth can be watched, which is quite rapid, oftentimes increasing more than an inch in twenty-four hours. When deep, it may remain a long time undiscovered, and be transported to foreign countries, without showing any symptoms of its presence. Before opening externally, a little boil may be observed, from which, when it bursts, or is opened, the anterior part of the worm protrudes. Gentle and continued traction should be made, the compress rolled three or four times per day, and great care taken not to break it, for serious results will be most likely to follow such an accident.

Whether the germs ever live and mature in the flesh after the death of the parent from such accidents, without first being deposited in the ground, is doubtful, and in view of that, the above-named case is an interesting one to observe. This case is interesting also in showing how long a period this entozoon can remain burrowed in the tissues, without acting as a foreign body, it being full six years since the patient was in Mogador, Morocco, where he remained nearly a month travelling with uncovered feet, and sleeping on the ground. He returned to N. Y. in August, 1854, and has since remained in the U. S.

THE RATIONALE OF THE HOT AND COLD STAGES AND PERIODICAL EXACERBATION OF DISEASES.

BY W. F. STUDLEY, M.D.,
OF YORKVILLE, N. Y.

THE existence of what may be denominated the Hot and the Cold Stages, or the Periodical Exacerbations of many, if not most diseases, will be generally admitted. The experience of every observing physician is that in a large number of diseases these mysterious phenomena are constantly recurring. My object is simply to throw out some suggestions which, if they do not solve the problems, will at least only add a few more harmless conjectures to the already accumulated mass. The consideration of *heat* and *cold*, as exhibited in the animal economy, involves the subject of calorification, and this again depends upon the *circulation* and the *nervous system*. No proposition in physiology seems more fully settled than the mutually modifying relationship of the nervous and the circulatory systems; again none more clearly proven than that the waste of tissue must be compensated by repair—and it is from the peculiar phenomena

which we see exhibited that the following propositions are deduced.

1st. That *abnormal cold*, as observed in the outset and oftentimes during the course of different diseases, is a consequence of suspension of nutritive processes, depending on nervous influences either centric or reflex.

2d. That *abnormal heat*, as observed in the same, is a consequence of exaggeration in the nutritive processes, depending on nervous influence either centric or reflex.

3d. That periodic exacerbations of disease, by which I mean more or less stated recurrences of depression and reaction, are simply phenomena of tissue exhaustion and resuscitation—waste and repair.

The Rationale of the Cold Stage.—Marshall Hall has given, in his philosophical researches, a key with which we may unlock many hitherto secret and profound mysteries, and the idea which we gain from him in reference to reflex action may be applied to the explanation in point. Which ever theory we adopt as explanatory of animal temperature, whether that of combustion between oxygen and carbonaceous material in the blood, or the more recent one of the assimilative and disassimilative processes, the fact of nerve influence as the great regulator and modifier of that temperature remains undisputed. Both physiological experiment and pathological accident point to and directly prove this. The raising or the lowering of the temperature of the body through any excitement or disturbance of the nervous system is a daily fact and a daily observation. The distinctive office of the circulatory system is that of bringing pabulum for the tissues. The distinctive office of the nervous system is the endowment of those tissues with susceptibility; one conveys the food to the part, the other modifies the chemico-vital action on which assimilation depends. Neither is independent of the other; on the state of the blood depends the condition of the nerves, and the nerves morbidly affected cannot yield that susceptibility necessary to an active, equable, elective affinity. The nervous system is the sentinel ever on the alert to warn against dangers without and within; it guards the pharynx and larynx, and, indeed, all the outlets and inlets to the body. In view of these functions, as also the intimate relationship which exists between nerve action and animal temperature, we may extend this reflex law to the capillary system. Over this extensive field may not nature have stationed her manifold sentient and motor sentinels? Disregarding the fact which is unimportant, the question we propose is whether the phenomena we seek to explain are referable to the well-known law.

Adopting the theory of combustion for the present, we will apply this law. Let us suppose a disease, beginning with a blood poison, has passed through its mysterious incubation (of whose nature we can perhaps never know anything), until it has reached that point at which peaceable toleration must cease. In accordance with the principle of reflex action this poison is, so to speak, repulsed. While the tissues throw off their effete matter they do not receive in exchange the poisoned blood. As a consequence of this twofold action, the blood becomes carbonized, and yet there is no commensurate combustion, since the demand for new blood is more or less diminished by this interruption in assimilation. Hence the sluggishness of the circulation, the interference with the process of combustion, and the deprivation of the calorifying agent; and hence the induction of a general or a partial chill. Whether in this process the nerve action is purely reflex or purely centric, the final effect must be the same.

Again, let us adopt the theory that animal temperature depends simply and solely upon the nutritive processes. So far as *nerve force* is concerned its *modus operandi* is the same. In one case animal heat is ascribed to the *act* of assimilation, in the other more or less to a product of that *act* considered as the fuel for the fire; but prior to all this the nerve force must still come in. With regard to the action of the nerves let us dwell more particularly upon the teachings of physiology. If we should simply generalize, the whole might be reduced to a syllogism. Thus it is a set-

tled point in physiology, that the nutritive processes depend upon the ganglionic or sympathetic system of nerves. Again, it is a settled point that upon these very nutritive processes animal temperature depends. Therefore any disturbance of that nervous system must be manifested in a corresponding abnormality of animal heat; and to this conclusion, after all, it seems that we must come, whatever data we take. But let us draw our conclusions from examples. Suppose a man has received concussion of the brain; the usual phenomenon immediately afterwards is *coldness* of the surface. Here it is evident that the great nerve centres are the parts primarily affected, and through them, the nervous system as a whole, and the consequence is reduction of heat. The connexion then between this invasion of the nervous system and reduction in temperature is most intimate, and the only ground for a charge of fallacy in our inference is the supposition that this reduction of temperature is owing to a direct effect upon the muscular power of the heart, whereby its action is impeded. But we may meet this supposition with another example. Let us take a case of paralysis. Here we *know* nerve influence is, to a certain extent at least, cut off, and although the sympathetic system, distributed to and presiding over the parts, may be entire, yet since undoubtedly one of its chief functions is to work in response to the stimulus of sensation and motions, when these are removed the natural result would be as we find it, viz. defective nutrition and its consequent reduction of temperature. In this case the heart's action is as normal and healthy as ever. It is not, therefore, from defective nutrition arising from the lack of a due supply of blood from the heart; but defective nutrition arising from *nerve disturbance*, that coldness in concussion of the brain, as well as in paralysis, may be brought about.

But without enumerating examples it is sufficiently evident that a serious disturbance of the nervous system *may*, and so far as our observation goes, does always produce a chill; and wherever we see this chill or reduction in temperature prolonged, as in paralysis; more or less limited in phthisis; and in all cases where we know nutrition is defective, we can but come to the conclusion that nerve force, nutrition, and animal heat, follow as direct cause and effect. It cannot be considered altogether chimerical if when we observe this phenomenon in many if not most diseases, we should ascribe it to the same common cause; when a person is attacked with erysipelas, and the disease is ushered in with a chill, and all acknowledge that some specific poison is at work in the system, we do not transgress the principles of analogical reasoning, if we account for it on the same premises that we do in injuries of the brain, or nervous system generally; and when a man has swallowed a poison, or inhaled the poison of a contagious disease, as small-pox, scarlatina, &c., or imbibed the general poison of malaria, and as a consequence falls a victim to disease which is ushered in with a distinct chill, we may with propriety turn for a solution of this problem to the well known and common effect of depressed nervous action, which effect is a suspension of the healthy and active processes of assimilation and dis-assimilation.

But after a limited period, in the majority of active diseases, at least, there comes a cessation of this cold stage, and reaction takes place. This brings us to our second proposition.

It is a common fact, coming under the daily observation of all, that the vital powers will often succumb, to a certain extent, to *one kind* of invasion, and yet be excited and aroused from their failing condition, by *another kind* of attack which shall supersede the former and bring out dormant and entirely new energies. Now, when we take into account what must be the condition and tendency of the molecular constitution of the tissues, dependent as they are for their very existence upon that vitalizing nervous system which during the chill is depressed, this very tendency to molecular derangement during the stage of depression, constitutes in the end the spur and irritant by which the sleeping energies of the nervous system are aroused. Thus one shock

may depress the system, and another of a different nature may arouse that system to an unwonted and undue energy. This I conceive to be the *modus operandi* of the reaction from the cold stage. In one instance the nature of this reaction may be excessive tissue repair, in another it may be excessive tissue disintegration; and in a third both processes may be simultaneous. But whatever may be the view taken upon this point, the idea which I wish to convey is that derangement in the vitality of tissues consequent upon suspended nerve force, constitutes the stimulus by which the nervous system is again aroused. In this respect it seems to be a phenomenon of reflex action. All of the healthy processes which for a period had been somewhat suspended, are now pushed to the other extreme in just the ratio of the stimulus applied, and the morbid irritability of the nerves excited. Blood is sent to the parts in greater quantities, for greater demands are being made by these great changes in the tissues; as a consequence of this, animal heat is evolved, and we have the phenomenon of the hot stage or what we commonly call *fever*. This is but the common law of all animal heat wherever and however exhibited? If a local irritation be set up in any part of the body, the result is a flow of blood to that part, and elevation of temperature.

This period of reaction, too, like the one of depression, is a limited one. Whether we take a well marked case of intermittent fever, giving us the striking changes in succession of *cold* and *heat*, and equilibrium, or whether we note those faintly blended lights and shades which characterize the course of continued fever, in each we must observe more or less the swelling and ebbing of the tide of the vital forces. In keeping with a universal law, the tissues having their waste, must have their period of repair; and hence, following the period of reaction, is a period of rest. If we suppose that, from many modifying circumstances, the stimulating cause does not act with equal force at all times; or that tissue repair is not as active at one time as at another; or again, that both stimulus and repair act with increased or decreased energy, we should explain the difference both of the periodic occurrence, and the character of that occurrence. But conceive of a disease where the invading cause remains the same, the susceptibility and repair of tissues the same, and the malady would be characterized by a well marked periodicity. It will readily be admitted that this view of things may be applied to all exhibitions of *muscular* action, and all *admitted* instances of reflex action involve *only* this idea of muscular action. It is plain that any abnormal action of the assimilating and dis-assimilating processes, such as we observe in the great majority of diseases, is so much labor at the expense of the nervous power at least; and if it stop in nature's own time and by nature's own process, we witness a periodicity which admits of the same explanation as the periodicity of a labor pain, and many of the spasmodic diseases, which are now so generally referred for solution to Marshall Hall's theory. Undoubtedly there are instances where this periodicity is maintained, after it has been once established, by that mysterious *something* which we call *habit*, even after the cause has been removed, as in neuromatous tumors, the neuralgic pains of which are still experienced long after their removal. In this respect nature seems to be moulded with a sort of plasticity to whatever impression it may be subjected; and since the very essence of the nervous system is impressibility and response, it will subserve the impetus given to it until either a new force rebuts it with a new and different impetus (which we may term an antiperiodic), or until, like a projectile, it has spent its force.

PHYSIOLOGY OF DROWNING.—M. Beau has laid before the French Academy an account of his experiments on this subject, made upon dogs. He gives as the result his belief that the death of the drowned has the greatest resemblance to that which happens in consequence of tetanic affection of the nerves of respiration.—*Comptes Rendus*.

Reports of Hospitals.

HOWARD HOSPITAL OF PHILADELPHIA.

EYE AND EAR DEPARTMENT.

[Aural Surgeon, LAURENCE TURNBULL, M.D.]

Inflammation of the Dermis.—Erysipelas.—Oct. 24th. Mrs. S., aged seventy, suffering from deafness and pain in the ear. An abscess was found on the navicular fossa. She has not been in good health for some time; is feverish, and has a similar abscess on her forehead. Besides this there is erysipelas of the auricle, extending into the meatus, which is red, cracked, and covered with bran-like epithelial scales. Directed *B. Pulv. carbo. ligni, magnes. calcin. aa 3j.* as a laxative; locally, an application of *ext. plumbi* and *ext. opii aq.*, slightly warmed, and the parts to be covered with oiled silk.

26th. Abscess opened; parts moist, and free from pain. Ordered *pil. calomel. comp. gr. v.* three times a day, and *B. ext. sarsap. c. fluid., liq. calcis aa f3iv.*, tablespoonful three times a day in sweetened water.

27th. Much improved; redness and itching continue; hearing imperfect from the tinnitus aurium made by the passage of the air over the dry scales in the meatus. Apply glycerin, and *ung. hydrarg. nitrat.* equal parts to the canal, with a camel's hair brush.

30th. Opened a second abscess, and again applied the lead and opium solution.

31st. Directed the application of a solution of gutta percha in chloroform to the meatus. The alterative treatment to be continued.

Nov. 4th. The eruption has entirely disappeared, and the ear has assumed its natural color. The treatment should be continued several weeks, with care in diet, and avoid covering the parts too warmly.

Glandular Form.—This variety usually occurs in young persons of a scrofulous, rheumatic, or gouty diathesis. The most frequent cause is the sudden application of cold air or water to the ear, when the system is in a state of excitement from any cause.

Symptoms.—It commences with itching of the ear, gradually passing into pain, increased by any motion of the jaws. The auditory canal is slightly swollen, and of a pale red color. When closely examined, this swelling is observed to consist of vascular eminences closely set together, or in some instances of pustules containing a lymphatic or purulent fluid. On the second or third day there is a discharge of muco-purulent fluid of an ammoniacal odor. The duration of the disease is from fourteen to twenty-four days. Kramer, Rust, and Krukenberg argue that this affection tends to the production of polypi in the meatus. The following case will illustrate this variety:—

Sept. 15th. Lewis L., aged ten years, has suffered for several days with an acute inflammation in his ear. He has been dull of hearing for eight months, the result of a cold. In the meatus of the left ear there were abscesses with glandular enlargements, and an accumulation of cerumen in the right ear. He was anæmic; bowels regular, appetite good. These abscesses were freely opened, and a warm lead solution applied. Iron was given internally.

18th. All traces of the abscesses gone, with desquamation of the epithelium. Hearing much improved. Directed to keep the ear moistened with a small quantity of sweet oil.

Oct. 3d. Been exposed to cold, and the disease has returned; the same treatment was renewed, with the addition of *hydrarg. chlorid. mit.* in alterative doses. After three weeks he presented himself cured.

Inflammation of the Cellular Tissue of the Meatus.—Cases of this variety have been very numerous during the winter of 1859 and 1860; having, we suppose, some relation to the epidemic of diphtheria prevailing at the same time.

An infant, aged two months, has fever, restlessness, and tossing about of the head. Upon pressure with the fingers at the root of the left ear, the child screamed loudly. This was soon followed by a free discharge of muco-purulent matter, accompanied with fibrous shreds and cheesy flakes. The ear was leached, and carefully washed out with equal parts of lime water and milk, and the bowels were kept free by the use of rhubarb and chalk. A small blister was applied for several hours in front of the ear, and followed by a poultice. This was renewed six times, and the wash changed for a watery solution of powdered cubeba, which was continued until the discharge ceased. As this ear improved, the right one became affected, and was similarly treated. By the end of four weeks the child had entirely recovered, without any imperfection of hearing. This case is a type of some twelve or fifteen similarly occurring in young children, most of which terminated without an extension of the inflammation to the membrana tympani. But when from neglect or mismanagement this occurs, and the disease goes on, deafness to a greater or less extent ensues from the destruction of the membrane. Much injury has been repeatedly done by the use of strong solutions of nitrate of silver, etc.

Mrs. G., aged forty-seven, of feeble constitution, was attacked in February with pains in both ears, accompanied by tinnitus aurium, and swelling, so that the meatus was completely closed. On the third day there was a discharge of a thin bloody matter, without any relief to the patient. The pain increased, so that no sleep could be obtained, even by the use of anodynes. The auricle was extremely sensitive to the touch. On the seventh day, after free leeching and the use of doses of one-tenth of a grain of morphia, and the application of a solution of morphia and extract of belladonna, the swelling and pain moderated. The discharge now was a thick cheesy pus, flowing out on the slightest pressure, in front of the ear. An infusion of rose-leaves was now directed to clean out the parts, and a small blister was placed in front of the ear, and remained five hours, after which a poultice was applied. The blister was twice renewed; in the meanwhile nothing being used to block up the meatus. On the tenth day abscesses were found within the meatus, which were opened. The patient was placed on a tonic treatment. For some two weeks she was deaf, but this gradually disappeared, as the thickening of the parts was reduced.

Mary M., aged twenty-three years, attacked in a similar manner, causing great hardness and deposit of lymph. An abscess formed at the bottom of the lobe, which was opened, giving vent to a large amount of pus. Warm applications were made to the parts, and then a solution of the acetate of lead *gr. i.* to the ounce was directed, with a blister in front of the ear. Citrate of magnesia was given in aperient doses, and fearing erysipelas, she was put on the *tr. ferri chlorid. gtt. x.* three times a day. She speedily recovered, without permanent deafness.

Loss of Membrana Tympani.—Andrew H., aged 16 years, had scarlatina, in 1855, and has been almost totally deaf since. By an examination of both ears, the membrana tympani was ascertained to be gone, along with the small bones of the ear. He could not hear a watch tick, though placed in contact with the ear, and understands his mother by watching her lips. By using the Eustachian catheter, both tubes were found to be pervious, although much narrowed. The tonsils were destroyed, and the soft palate and arches covered with diseased mucous membrane. The most important point in the treatment would be to increase, if possible, the power of the auditory nerve, but as there is scarcely anything left in the ear, but perhaps the slopes, an attempt might be made to close the cavity, and thus form a shut sac, by the method of Mr. Toynbee. A drum will be made for this case, with a metallic tube, and at the outer extremity of which will be a sort of flange to prevent it from slipping into the ear.

For the affection of the throat he was ordered, *B. Pulv. alum. 3ss. pulv. zinci sulph. 3i.*, to be applied to the parts.

Dr. T. remarked, that his faith in Mr. Toynbee's invention had been considerably shaken, as in four out of five cases after it was applied, he was compelled to remove it.

Inflammation of the Mastoid Cells.—Mrs. D., aged 35, has suffered for three weeks with pain in the ear and head, the effect of a cold. There is deafness, with great redness, heat, pain, and swelling at the back of the ear; the external auricle looking forward, being pushed out from the bone. There was no perforation of the membrane. She had fever; pulse 102, and the pain intense, in spite of hot fomentations. Dr. T. remarked upon the rarity of this disease, he having seen but two cases in hospital, and one in private practice, among hundreds of cases of ear affections. In the early stages, active and free depletion should be employed, both by the arm and leeches to the back of the ear. At the present stage she will be freely purged with calomel, followed by alterative doses of the same; she must have foot-baths frequently repeated, and pulv. ipecac. et opii in full doses, to relieve pain and act on the skin. Three days later she was much improved; the leeching had caused a feeling of faintness, and relieved the brain, but there is evidently pus under the pericranium. A free incision was made down to the bone, causing a discharge of bloody serum, after which poultices were applied. Three days subsequently, pus was flowing freely; all the redness and pain was gone. She felt quite relieved, and was able to be about her usual occupation. She was directed to take bichlor. hydrarg. gr. one-thirtieth part, in tr. cinchon. comp., with good diet. Her hearing is very imperfect.

LONG ISLAND COLLEGE HOSPITAL.

COMPLETE OCCLUSION OF THE ALÆ NASI AS A SEQUELA OF CONFLUENT SMALLPOX.—CURIOUS CONGENITAL MALFORMATION OF THE HAND.

[Service of Dr. JOHN G. JOHNSON.]

COMPLETE OCCLUSION OF ALÆ NASI, A SEQUELA OF CONFLUENT SMALL-POX.—OPERATION.

BRIDGET Mc—, æt. 5 years, was brought to the clinic with complete occlusion of the anterior nares, the result of an attack of confluent small-pox, from which she suffered six months before on board an emigrant ship. She had never been vaccinated. When brought to the hospital, the mouth was kept wide open, no air entering by the nostrils. The mother stated that the patient had great difficulty in eating and drinking; that she would sometimes nearly suffocate. The voice was nasal in character. Dr. J. attempted to introduce a small silver probe into the nares, but without success; the cicatrices were so large and firm that it was impossible to say where the alæ terminated, and where the septum commenced. A No. 1 steel bougie was then tried, and dilatation attempted by pushing firmly against the cicatrix. Finding it impossible to dilate the parts in this way, a slit was made on either side, and a No. 4 bougie introduced. Dilatation was continued till a No. 7 could be easily introduced. The child made so much opposition to these measures that the mother discontinued attendance, and the case was lost sight of for the next two months, when she again returned with the nares so much contracted that a No. 1 bougie could hardly be introduced. She was then put under the influence of chloroform; slight incisions were again made; sponge tents were introduced, kept in their place by collodion, and the whole so completely covered with straps that the child could not remove them. These were from time to time removed, and replaced by larger ones, and now the nostrils are of very fair size, although the dilatation has been discontinued for several months.

CURIOUS CONGENITAL MALFORMATION OF THE HAND.

HENRY CADOZA, residing at 133 Smith street, of Jewish parentage, was brought to the clinic with a lacerated wound of his right hand. The most interesting feature of this case

was the congenital malformation of the left hand. All the other children of the family are well formed. His mother assigns as a reason for the malformation, that one day when about two months pregnant, she was dressing a cabbage for dinner, and put her hand on a snail. She immediately withdrew the hand, but her fright was so great that she did not recover from it for some days. There is no hereditary tendency to malformation, and the child is well formed in other respects. The left hand is much smaller than the right. The thumb, though small, is perfectly developed, having both phalanges, nail, etc. The forefinger has a single small phalanx, beyond the extremity of which a small fleshy growth without nail continues for about half an inch. The middle finger is similar in formation to the forefinger, having a small imperfect phalanx, and fleshy growth beyond it. The third or ring finger is entirely deficient, having neither phalanx; a fleshy pedicle shows where the finger should be. The fourth finger is similar to the first and second, having a small phalanx, and a pedicle attached.

BELLEVUE HOSPITAL.

OPERATIONS FOR RADICAL CURE OF HERNIA.

[Reported by EUGENE PRUGNET, M.D., House Surgeon.]

CASE 1.—MORRIS Vail, æt. 57 years, native of Ireland, laborer, was admitted August 24, 1859, with an oblique inguinal hernia. Sept. 1, Dr. Gouley performed the operation for its radical cure with Nott's instrument, invaginating the scrotum, and retaining it in that position by means of silver sutures and pledgets of lint; a compress was then placed over the canal and secured by means of a spica bandage. Sept. 8.—Wire removed; invagination reduced; canal occluded. He continued in this condition until October 7, when he was discharged cured.

CASE 2.—JOSEPH Lang, æt. 52, single, Germany, hatter, admitted Nov. 14, 1859, with a large oblique scrotal hernia of the right side, of four years' standing, but reducible; sac very much thickened, has a severe cough, which may interfere with radical cure. Dec. 3.—Dr. Jas. R. Wood performed Nott's operation. Dec. 7.—Extensive erysipelatos inflammation in lower part of the abdomen. Suture removed, truss applied in lieu of spica bandage; scrotum supported by suspensory bandage. Dec. 10.—Hernia descended into scrotum, reduced without any difficulty, patient tied in bed to keep him quiet. Jan. 4, 1860.—Patient allowed to rise, the canal being filled with lymph, and hernia remaining reduced. Jan. 12.—Patient discharged cured, there being no return of the hernial protrusion.

CASE 3.—HENRY Geissler, æt. 33, single, Germany, clerk, good constitution, temperate, admitted Nov. 5, 1859, with an oblique reducible inguinal hernia of left side, which had existed for an indefinite period. Dec. 3.—Dr. Jas. R. Wood passed a seton of silk suture through the canal with Armsby's instrument, but owing to the assistant having allowed the instrument to slip, the needle was only passed through the external ring. A compress was then placed over the canal, and secured by means of a spica bandage. Dec. 7.—Seton removed, and truss substituted for single spica bandage. Dec. 15.—Inflammation has entirely subsided; hernia remains reduced; patient allowed to get up, wearing a truss; impulse over abdominal ring slightly felt on patient's coughing. Dec. 28.—Hernia came down whilst at stool. Jan. 10th.—The House Surgeon operated by introducing a seton, passing it completely through the canal; a single spica bandage and compress was placed over the part; patient was kept in bed for a month. Feb. 15.—Discharged with truss, no impulse being felt.

CASE 4.—PETER Kelly, æt. 33, Irish laborer, good constitution, was admitted Dec. 20, 1859, with an oblique inguinal hernia of right side, caused by a fall into the hold of a ship a few days before. Jan. 8, 1860.—Dr. Jas. R. Wood operated for its radical cure in the same manner as in

Case No. 3, using Riggs' needle. Feb. 1.—Spica bandage removed and truss substituted. Feb. 28.—Discharged with truss.

CASE 5.—John Martin, æt. 41, Germany, laborer, admitted Feb. 6, 1860, with an oblique inguinal hernia of right side, as large as the closed fist, of twelve years' standing; has worn a truss, but retains it in position with difficulty. He has also a small hernia on left side. April 14.—Dr. Parker operated for the radical cure of the hernia, by invaginating with his finger a portion of the integument of the scrotum, and passing a long curved needle armed with a seton of lamp wick through the canal, bringing it out upon the abdomen about one inch above the internal ring; a cork on one end of the seton was used as a plug to keep up the invaginated scrotum, and the other end on the surface of the abdomen was tied tightly over a roll of adhesive plaster. April 20th.—Patient has been comfortable all the week, and to-day the seton was removed; the hernia does not descend. There is considerable inflammation about the part, and free suppuration along the track of the seton. A truss was applied and patient directed to remain on his back. May 16.—A radical cure has apparently been effected, and the patient was discharged to-day.

Nott's operation was performed by Dr. Sayre in one case, but failed; Riggs's operation in another, by Dr. Church, with a similar want of success; the hernia returning in both cases before the patients were discharged. In the first five cases the patients were directed to wear a truss for one year; none of these have as yet returned to the hospital.

NEW YORK HOSPITAL.

AMPUTATION OF THE THIGH—SECONDARY HÆMORRHAGE—DISLOCATION FORWARDS OF THE FIRST PHALANX OF THE THUMB—REDUCTION—DISLOCATION OF THIGH—REDUCTION WITHOUT ANÆSTHESIA.

[Reported by THOMAS B. WARD, M.D., Assistant Surgeon.]

AMPUTATION OF THIGH—SECONDARY HÆMORRHAGE.

F. W.—, seaman, æt. 37, a native of Prussia, was admitted into the Hospital on the night of Aug. 11, during the service of Dr. Watson. Half an hour before admission, while engaged in firing a salute, the cannon which he was ramming exploded prematurely, the ramrod striking against his left thigh. His injuries consisted of a compound comminuted fracture of the femur four inches above the knee joint, and slight powder burns about the face. The fracture was oblique from above downwards and inwards, so much so that the finger passed in for its full length failed to reach the lower end of the upper fragment. The adjacent tissues were much contused, but the artery, although exposed for an inch of its length, was apparently uninjured. Hæmorrhage had not been profuse, and patient was suffering but slightly from shock. The spicula of bone were removed, gtt. xv. of Magendie's solution administered, and in an hour he had fairly reacted. At this time he was seen by the Attending Surgeon, who, despairing of saving the limb, proceeded at once to amputate by the circular method, just above the seat of injury. Very little blood was lost during the operation. The stump was then dressed in the following manner: a bandage was first slightly applied from above, forcing the integument downwards, and when the roller had reached within two inches of the stump, the flaps were accurately adjusted, and so held by wide strips of emp. adhesiv.; no sutures being employed. The roller was then continued down to the edge of the stump. This, with a cold water application over the straps, completed the dressing. For the two days following the operation patient showed slight febrile reaction, but on the third day the pulse settled down to 80, and continued at that figure until the tenth day after the operation. At this period the dressings were for the first time removed, the ligatures coming away with them. The stump was found to

have united by first intention, from the edges nearly to the middle, not more than half an inch in extent of suppurating surface remaining on either flap. The discharge now amounted to about $\frac{3}{4}$ iv. of blood per diem. The same dressings were again applied, and patient continued to do as well until the next afternoon, when his bed unfortunately received a heavy jar. He states that at the time he felt something in the stump give way, and leisurely examining the part, found the dressings already stained with blood. The House Surgeon was immediately summoned. He at once applied a tourniquet, but not before $\frac{3}{4}$ x. or $\frac{3}{4}$ xij. of blood had been effused. The dressings were removed immediately, and when the tourniquet was loosened, a stream of blood issued per saltum from a point deep in the stump and near the bone. This left no resource but to open the stump, which was immediately done: the vessel was then readily seized with a tenaculum, and a ligature applied, but the tissues around were too soft to allow it to hold, and after its application had been twice repeated, with the same result, a curved needle armed with a double thread was carried higher up in the more solid tissue, and with good success. The hæmorrhage now in fact was completely arrested; the compress which was applied over the straps not even being soiled when it was removed the following day. For two days following the operation of opening the stump, a free discharge of grumous matter occurred, but this on the third day gave place to an equally free discharge of laudable pus. No constitutional symptoms followed beyond a slight acceleration of the pulse for a few days, and at the end of a week the patient was again favorably progressing.

DISLOCATION OF FIRST PHALANX OF THUMB FORWARDS.

Mary B.—, æt. 35, a native of Ireland, and by occupation a housemaid, was sent to the Hospital on the night of August —, by one of the Attending Surgeons, with the request that the above dislocation should be reduced. The luxation occurred about four hours before her admission by a fall from a chair, her whole weight catching on her thumb. The patient was a stout muscular woman, and as every effort had previously been made to reduce it without ether, she was at once anesthetized. As soon as the muscles had become fully relaxed, strong dorsal flexion was tried in the manner usually recommended; but as this, after long continued effort, gave no hope of obviating the trouble, Malgaigne's finger forceps were brought into requisition. This instrument, although carefully adjusted, and held with a powerful grip, was not of the slightest use, invariably slipping when firm extension was attempted. Nothing now remained but the clove-hitch, and this, the oldest and plainest, but still, as I believe, the best mode of making extension in these cases, was resorted to. The hitch was made from a No. j. bandage, the thumb having previously been enveloped in white leather. This method was almost immediately successful, the operator having the satisfaction of finding, after the first attempt at extension, the phalanx lodged on the inner edge of the metacarpal bone, whence, with slight manipulation, it returned with a snap to its place. No violence was done to the integument of the thumb by this method; the only abrasion upon it (a very slight one), having occurred by the slipping of the forceps. A palmar splint was applied to the thumb, and cold water dressings ordered. The next morning patient was able to leave the Hospital, there being present but slight swelling, and the motions of the joint unimpaired.

DISLOCATION OF HIP—REDUCTION WITHOUT ETHER.

In contradistinction to the difficulty experienced in reducing the above dislocation, the following case may be cited: M. P.—, a boy aged 14, entered the hospital in the afternoon of Aug. 23, having an hour before sustained a dislocation of the femur (on the dorsum) by a fall from a height. The deformity was characteristic, and the trouble at once recognised. He was put to bed, and the luxation reduced by Reid's method, on the first attempt, and without ether.

American Medical Times.

SATURDAY, SEPTEMBER 8, 1860.

PHYSICIAN AND APOTHECARY.

THE memory of many now living can recall the time when the New York physician was his own apothecary, his person all redolent of the composite aroma exhaling from the health-giving preparations which distended his ample port-manteau, and the daily entry in his ledger gave as prominent a place to pill and potion as to professional advice. In the good old times when cinchona bark, in spoonful doses, was the standard febrifuge, and calomel and jalap the official stimulant of torpid livers and sluggish bowels, the first lessons of the youthful candidate for Esculapian honors were in the use of the mortar and pestle, and much of his subsequent tuition consisted in acquiring the art of expertly moulding the pill at his fingers' ends. There was then little need of laws against the importation of impure drugs, for the physician selected each individual article, as he selected his lancet, according to its potency. There was then no more doubtful interpretation of the action of the pill than the lancet; if the latter refused to cut, the fault was charged to the temper of the steel, and not to a change in the type of the disease, or a constitutional peculiarity of the patient; and so of the pill, if it did not produce its desired effect, it was esteemed inert, and cast aside as refuse. Purity in the drug market was then a necessity, for the purchaser applied it directly to its proper service, and personally tested its efficacy, equally as does the husbandman the quality of the seed which his own hand casts into the soil carefully prepared for it.

But among the many divisions of labor which the progress of civilization induces, is that of physician and apothecary, in dispensing remedies to the sick. The increase of our cities especially, in wealth, and in the refinements of a higher social state, has called into existence a class of shopkeepers who have monopolized the business of compounding and dispensing medicines. It will at once occur to every reflecting reader, that this division of labor is of great importance, not only to the progress of pharmacy, but equally to that of practical medicine. While these two departments remain united in a single profession, little improvement can be expected in either. The former will almost universally be regarded as wholly subordinate to the latter, and receive no other attention than is deemed necessary to success in the general practice of medicine. And yet that attention which the practitioner is required to give to the selection and preparation of drugs, withdraws him from the close and accurate study of those more recondite subjects on which the progress of medicine depends. If we contrast the progress and present position of these departments in countries where they have been separated, with others where they are still more or less united, these statements are readily proved. In France and Germany the pharmaciens, or dispensing chemists, have long been a distinct class; they are compelled to qualify themselves by a thorough academic and pharmaceutical

education, and then follow their chosen business exclusively. The result is seen in the elevation of this class as a scientific body, for as its representatives we may mention the names of Liebig, Robiquet, Pelletier, Persoz, Dumas, Trommsdorf, Varentrapp, Fresenius, etc. Their innumerable and invaluable contributions, not only to pharmacy but to all departments of chemical science, will occur to every reader. The part which these eminent pharmaciens take in the routine of the druggists' business, and the social and political rank to which they have attained, are well given in the following anecdote by Mr. Mackay, of Edinburgh:

"Professor Christison repaired to Paris about thirty-four years ago, to study practically the higher branches of chemistry. His adviser there, the late eminent physiologist, Dr. Edwards, recommended, to his surprise and amazement, that he should place himself under the tuition of a Chemist and Druggist. The Professor's surprise, however, ceased, when he found he was to have for his teacher, under the designation above given, the late amiable, inventive, scientific Robiquet. M. R.'s dwelling communicated with his boutique or shop, where he superintended an extensive dispensing establishment, and with his laboratoire, or Chemist's laboratory, he, in immediate contact with the ordinary routine of trade, carried on with unwearied enthusiasm those scientific researches by which the name of Robiquet will ever be distinguished amongst the most successful cultivators of chemical science. As if to make the nothingness of Pharmaceutists in this country at that time complete, the Professor further states it required little acquaintance with French chemistry to perceive that this distinguished Chemist was the type of a class in France numerous representing the higher walks of the profession of Pharmacy, men to whom the world has since assigned the most elevated rank as chemical discoverers in a field equally rich in scientific and practical results. Some of these Pharmaciens or dispensing Chemists of Paris attained to the rank of Members of the French Institute, the rarest and highest of all purely scientific honors in Europe."

The reciprocal advantages which practical medicine derives from this entire monopoly of the Pharmaceutical art by a distinct class of eminently scientific men, may be seen in the activity of the investigations in every branch of medicine in these countries. In Great Britain, the apothecary is still the medical practitioner to the masses, and as a consequence the status of pharmacy is very low, and affords the most striking contrast to that of the continent. The position and character of the pharmaceutists of our own country are in a transition state. Such is the state of the medical profession, so low the standard of education required of practitioners, and so large the number who annually enter its ranks, that the general practice of our large towns is entirely monopolized by regularly graduated physicians, and the apothecary is necessarily almost entirely excluded from the practice of medicine, and compelled to confine himself to the business of his shop. But a new evil springs from this limitation of his occupation; finding, in the immense competition to which an unrestricted license to practice as an apothecary gives rise, that the dispensing of medicines on prescriptions pays but poorly, he becomes the retailer of nostrums, and at length extends his business to the sale of any article which the public taste may require. Accordingly he converts his store into a dazzling bazaar, whose gaily decked windows excel, by day, in variety and novelty of article those of the neighboring toy shops, and whose brilliant and variegated lights vie, at night, with those of the oyster saloons. Here everything of a fancy nature finds a place. In no establishment, save a pawnbroker's

shop, can be found such a collection of heterogeneous articles as in one of our attractive retail drug stores. But the American Apothecary, intent upon gratifying every taste of his customers, does not always stop with the fancy trade, but extends his business to the gratification of the pleasures of the palate, and over his counter retails liquors of the same impure quality as his drugs. In this connexion we cannot forbear quoting the description of a prominent house in Boston, a "Gem of a Drug Store," as it is entitled by a correspondent of the London Chemist and Druggist, but which is a fair description of such stores generally, so far as the proprietors are able to furnish them.

"This shop, which has been recently opened, is located on the spot dear to all doctors, druggists, and tavern keepers—the corner lot; and its beautifully variegated marble-paved entrance cannot fail to strike the most unobservant. On entering you find the same paving continued right through; counters also of marble, handsomely carved and panelled with mirrors, and interspersed at top with deep show cases, with silvered mountings. The counter scales are also sunk in the marble, the only portions visible being the pans and parts of the arms; the weights fit into vulcanite cups sunk in the counter, and, like the entire metal work, are electroplated. Of course the never-failing soda fountain appears; it is made of cased ruby glass, handsomely cut, and electroplated inside. The shelves are fitted at back with mirrors, and supported by Scagliola columns; the bottles are of varied colors, and labelled in gold in a very elegant style. Pots are supplanted by shouldered glass jars labelled to match the bottles, grooved in the lids, and lined with India-rubber; the jars are rendered perfectly air-tight by having their necks fitted into the grooves. I was shown some glass show jars about twelve inches high, the cutting of each of which took about seven days. The stock being quite fresh and tastefully arranged, produced, in conjunction with the fittings which I have attempted to describe, a beautiful appearance. Lubin's Extract, Child's Hair Brushes, Prout's Tooth Brushes, Ede's Crimson Ink and Diamond Cement, and the various novel niceties of Morgan Brothers (all of which seem to have obtained a great reputation out here) caught my eye. The shop, though by no means large, occupied the proprietors nine months in preparing, and cost them over 3000*l*.; and they now have the satisfaction of transacting a thriving business in the most original and handsome store in America."

The above sketch affords a melancholy proof of the low state of pharmacy in this country. Such a display is surely not intended to facilitate the dispensing of medicines, but is simply and solely designed to attract customers to the purchase of fancy articles. It may be inferred that an American apothecary is not a very brilliant ornament of the profession represented by a Liebig and a Robiquet. He is in fact but an ordinary shopkeeper, retailing drugs in addition to the other and more extensive branches of his business. Too often he has neither an academic nor pharmaceutical education, but enters upon his business, after an apprenticeship more brief and less thorough than that of the ordinary merchant's clerk. It is not surprising that, with such a class of apothecaries, adulteration of drugs, by every possible means, is as much a matter of business as the watering of milk by the dairy-men? Nor need we anticipate any diminution of the homicides and suicides by poisons, whatever may be our laws, while our druggists, as destitute of moral and professional obligations as the common shopkeeper, regard strychnine as vendible an article as a tooth pick.

But the druggist is not alone in this abuse of his profession. Too often the physician, also, is a party to the "tricks

of trade," and prostitutes his own high calling to the low arts of gain, by conniving with the apothecary. It is not altogether a novel occurrence for physicians, of self-constituted respectability, regularly to emerge from an inferior drug store in the vicinity of their residences and commence their daily round of visits from this low stand-point. It very frequently happens that patients are sent long distances to *my* druggist under the foolish pretence of the *cheapness* and *purity* of his articles, when, in truth, the physician and druggist have laid their heads together to cheat the patient, and share the proceeds of their crime. Indeed the utterly disreputable and knavish practice of having a profit or per centage on their prescriptions, is still followed by physicians who would fly into a passion on being accused of stealing—a crime not more revolting to a truly conscientious mind.

But low as is the grade of pharmacy with us, we have the most cheering evidences of reform. There is a band of earnest, enlightened men in that profession, who, scorning the low mediocrity towards which the mass gravitate, are nobly striving to elevate the standard of pharmaceutical education. In our larger towns, as Boston, New York, Philadelphia, Baltimore, St. Louis, Cincinnati, and Chicago, schools of pharmacy have been established, and regular courses of instruction are given by competent teachers. In addition to these schools, the basis of true reform, they have established a national Pharmaceutical Association, which comprises upwards of three hundred members, who are animated with that spirit of progress in the science and art of pharmacy, which must result in its renovation. Their annual gatherings are well attended, and the published proceedings of their meetings make a volume respectable in size, and replete with scientific information. We hail these cheering tokens of a better time coming for the profession of pharmacy.

But medical practitioners are deeply interested in the educational qualifications of apothecaries, and cannot remain idle spectators of the efforts of those who are struggling to elevate the character of their profession, and purify it from the gross abuses to which it is subjected by unworthy members. No respectable physician will withhold his assent to the following proposition:—It is necessary to the successful practice of medicine to have educated and scientific apothecaries to prepare and dispense medicines. It follows then that physicians should patronize only that class of druggists who are educated. They should shun the herd of so-called apothecaries, whose brilliant show-shops adorn nearly every corner of our thoroughfares, and direct their patients *exclusively* to regularly educated or properly qualified pharmacutists—in a word, to *graduates of the colleges of pharmacy*. These institutions, wherever located, deserve the cordial support of the medical profession. In our city that obligation derives tenfold force from the legal restrictions which protect the pharmaceutical art from being exercised by incompetent men. The following just and wholesome law has stood on the Statute Book of the State of New York for the last twenty years—a law that should never have been allowed, for a moment, to remain inoperative.

§ 42. No person shall be hereafter allowed to commence or practise in the city of New York the business of an apothecary, or that of preparing and dispensing medicine, or of preparing or putting up physicians' prescriptions,

without having previously obtained the diploma of the College of Pharmacy of the City of New York, or unless furnished with a diploma from some other regularly constituted College of Pharmacy or Medicine, or shall have passed an examination of the censors of the Medical Society of one of the counties of this State, and have been furnished by such censors with a certificate of his qualifications for the business of an apothecary, which diploma or certificate he shall produce to the secretary of the said College of Pharmacy, to be by him registered without charge.

§ 43. Any person offending against the provisions of this law shall be subjected to a penalty of fifty-one dollars for each and every offence, which may be recovered, with costs, in the name of the people of the State of New York, in any civil court of record; and the said fines, when collected, after deducting such reasonable counsel fees as the court shall allow, shall be paid by the district attorney to the treasurer of the New York City Dispensary for the use of said Dispensary.

THE WEEK.

DURING the ensuing week (on Tuesday), the American Pharmaceutical Association will hold its ninth annual meeting in this city, agreeably to the following announcement:—

"The next meeting of the Association will be held on the second Tuesday of September (11th), 1860, at three o'clock P.M., at the Hall of the University Building, on Washington Square, New York City. The Lafarge House, 673 Broadway, convenient to the Hall, has been selected as the rendezvous of the Association when not in session, and the home of those not residents of New York, ample accommodations for the purpose having been secured by our New York friends, at a reduction from usual rates. All members, and persons who wish to become members, are requested to report themselves at the Hall of the University Buildings, Washington Square, or at the Hotel. Members are requested to forward the names of their friends whom they wish to propose for membership, so that they may be elected at the first session of the next meeting. Members will confer a favor by notifying the Treasurer of the decease of any member during the last year. Suitable arrangements will be made for the exhibition of specimens at the meeting. From the manifestly increasing interest in the Association, a large attendance is expected, and it would be very gratifying to meet every member, and all Pharmacists who are interested in our objects."

The labors of this body of co-workers in that department of practical medicine especially devoted to the preparation of medicines, are by no means sufficiently appreciated by practitioners. In its sphere it is striving to elevate the character and extend the qualifications of apothecaries, and advance Pharmacy as a science in the same manner (but against greater obstacles) as the American Medical Association is aiming to advance the best interests of the medical profession. The daily proceedings of this convention will prove interesting to medical men, and we trust that it will not be allowed to close its session without some token or expression of interest in its objects and success, on the part of the medical profession of the city.

At the last meeting of the American Medical Association it will be remembered that the following resolution was passed:—

"Resolved, That it be recommended to the different States to collect subscriptions of not more than one dollar each from every regularly educated physician, to aid in the erection of a monument about to be placed in Westminster Abbey to the memory of John Hunter—all moneys col-

lected to be forwarded to the Chairman of the Committee hereby appointed."

The committee, of which Dr. HENRY I. BOWDITCH, of Boston, is chairman, has issued a circular to the profession, from which we make the following extract, explaining the object of the vote, and the plan of operation:—

"It appears that the remains of John Hunter have long slept in obscurity in the vaults of a comparatively unknown church in London. In February, 1859, the English government determined, as a sanitary measure, to close the vaults for ever. An ardent admirer of Hunter's genius and labors, knowing this intention, brought the subject to the notice of the medical profession of England. Great interest was aroused, and with the hearty coöperation of the Dean and Chapter of Westminster, the remains were re-interred March 28, 1859, with no ceremonials, under the pavement of that old Abbey, where are gathered so many of the great of the Anglo-Saxon race. A subscription was likewise opened to defray the expense of a fitting and permanent memorial to the memory of our illustrious associate. As the medical profession of America claims to honor John Hunter, and to regard him as one of its greatest men, it is proposed to obtain one dollar from every regularly educated physician in the United States, who cordially agrees to the above estimate of Mr. Hunter, and who likewise believes that it is well to cultivate friendly relations with our medical brethren in Great Britain. The autograph names of all subscribers will be arranged in a volume, to be deposited in the Library of the Hunterian Museum in London. It is impossible for the Committee to decide upon any uniform method of obtaining subscriptions. That decision will be left to the judgment of the individual members of the Committee in their respective States. Massachusetts, through its State and District Societies, has already subscribed, and the names of the subscribers have been enrolled in books similar to that now sent to you. This would seem to be a good method where such societies exist. Where none do exist, and also in large cities, it would perhaps be well to employ a collector to present the subject to the profession, the expense to be deducted from the amount subscribed—unless, as has happened in Massachusetts, a few individuals choose to meet that extra expense. It is hoped that on or before the next meeting of the American Medical Association at Chicago, a report may be made. The individual members of the Committee will please remember this date, and also that, according to the terms of the vote by the Association, all money must be sent to the Chairman of the National Committee."

PHYSICAL EDUCATION is just now all the rage. The brilliant exploits of the American Champion in the prize ring have inaugurated a new era in the muscular development of the Yankee race. Prize fights are now of almost daily occurrence, and so popular are they becoming, that we shall soon have Justices of the Peace attending the exhibition to hold the stakes, and Sheriffs to preserve order. The enthusiasm of the lower classes in the cultivation of muscle has gradually permeated the upper strata of society, and we find that the training of our young men in the science and art of physical development, is hereafter to form a part of the curriculum of their college studies. Amherst, long noted for its staid orthodoxy, fired with the spirit of young America, has instituted a Professorship of Hygiene and Physical Education. Dr. JOHN W. HOOKER, of New Haven, is the favored recipient of the honors which cluster thickly around the first American professorship of Hygiene and Physical Education. We do not know what will be the course of instruction adopted in this novel Professorship, but we believe its teachings can be made productive of much good to the coming generations of Collegians.

Reviews.

PREVENTIVE MEDICINE. STATISTICS OF SMALL-POX AND VACCINATION IN THE UNITED KINGDOM, and the necessity for a better system of Vaccination in Ireland. By WILLIAM MOORE, A.B., M.B., Physician to the Hospital for Diseases of Children. Dublin: 1859, pp. 14.

PREVENTIVE medicine, the only rational study of the physician, has always been the allegation of pseudo-medical reformers. With variations, this note has been piped in our ears until we have become deaf to its significance. The medical profession has always been alive to the importance of preventive medicine, and has undertaken and accomplished all that has yet been done in this ample and fertile field. The discovery of every method of protecting communities or individuals from prevailing diseases, and its practical application, is to be credited to medical science and medical heroism. If society, or even the advocates of rational and preventive medicine, would appreciate and apply the measures devised by medical science for the preservation of the public health, there would be little opportunity left to carp and rail at the inefficiency of medical men. The history of vaccination forcibly illustrates our remark. From the first discovery of the protecting power of cow-pox, medical men have had to contend against the prejudices of the learned, the ignorance of the masses, and the indifference of authorities, in their efforts to extend its blessings. If their efforts had been energetically seconded by the community, that most disgusting of all diseases, small-pox, would have been exterminated. On the contrary, we have to witness this scourge of the human race almost daily, and note the score of deaths which it weekly adds to our mortuary reports. The criminal negligence of vaccination is thus shown by the author of this instructive little pamphlet:

"It is considerably more than half a century since that ever-to-be-remembered benefactor of his race, Dr. Jenner, first proved to the world the preventive properties of vaccination; and yet the mode in which this discovery, the value of which it is impossible to estimate, is carried out at the present day in some parts of this enlightened country is easily seen, when we find the deaths in England and Wales, from small-pox, in nine years, from 1848 till 1856, killed 41,290 persons, or 4,587 every year. In Eaststonehouse, in 100,000 the deaths were 146; in Plymouth, 134; Penzance, 105. According to Dr. Farr, during the year 1857 nearly 4,000 patients succumbed to the disgusting and clearly preventible pestilence known as variola or small-pox, an alarming increase of 1,659 upon the deaths of the preceding year. The imperfections of the Vaccination Act, and the want of a more compulsory system, are defects to be remedied if this foul disease is not to gain ground. Speaking of the prevalence of epidemics, he says that 'small-pox was extremely prevalent, and fatal in several districts, in South Staffordshire, and in contiguous parts of Worcester-shire; it caused 276 deaths in Wolverhampton; 69 in Walsall; 171 in West Bromwich; 251 in Dudley; in Liverpool and West Derby, 188; in Manchester and Salford, 113. In Cardiff, where there is efficient drainage, and the mortality from other epidemic diseases was light, 215 deaths were caused by small-pox.' The Registrar-General's Returns for the three months ending March 31st, 1858, showed that in certain districts in England the deaths from small-pox amounted to a fourth part of the entire district, and from the same returns, for the week ending the 20th of

August last, I find 20 persons, including 14 unhappy children under 5 years of age, died, in London, of small-pox; such a fact, occurring in the greatest centre of civilization, require no comment. To continental countries, who borrowed this prophylactic from us, it must seem somewhat unaccountable that we continue to lose hundreds for their units from this pestilence."

"Now, let us put down the deaths in England and Wales from small-pox annually at 4,000—a low estimate—and assuming that these cases had been all carefully vaccinated, and that say even 5 per cent. caught variola, 200 in all, and of these 200 that 5 per cent. died, viz. ten, by this calculation, which is giving a wide latitude for mortality, we could save 3,990 cases out of the 4,000 to this community. And thus we would be attaining the status of immunity from small-pox enjoyed by some of our continental neighbors, instance Denmark, where the disease has not shown itself for fifteen years continuously; and when it did re-appear, its virus was so blunted as to excite comparatively little uneasiness."

Preventive medicine should ever be the theme and study of medical men, and despite the rebuffs of that society which they aim to protect from wasting pestilences, and the more insidious diseases which are generated in the homes of the people, they should still urge the application of the laws of hygiene which they have discovered!

THE NEW SYDENHAM SOCIETY PUBLICATIONS.

WE have too long delayed to acknowledge the receipt of the remaining two volumes of the first year's publication of this Society. The fourth volume consists of two treatises, by Prof. SCHROEDER VAN DER KOLK:—I. *On the Minute Structure and Functions of the Spinal Cord and Medulla Oblongata*; and, II.—*On the Proximate Cause and Rational Treatment of Epilepsy*. Volume Fifth contains the following selected monographs:—*Kussmaul and Tenner on Epileptiform Convulsions from Hemorrhage*; *Wagner on the Resections of Bones and Joints*; *Graefe's Three Memoirs on Iridectomy in Iritis, Choroiditis, and Glaucoma*. Of the value of these Essays it is not necessary for us to speak, as the names of the authors, and the subjects, are sufficient guaranty of their importance. We may say, however, of the publications of the Society thus far, that they evince the very best judgment on the part of those who control the selection of monographs for publication, and give evidence that the volumes of this society, after several years, will constitute of themselves a library on practical medicine. We are glad to notice the prosperity of the Society, which now has 2828 members, and has determined to publish the magnificent Atlas of Skin Diseases, by Hebra.

THE HUNTER STATUE.—At the last meeting of the Committee for erecting a statue to the memory of our great physiologist, Mr. South reported that he had received a letter from Dr. Henry Bowditch, of Boston, U. S., from which we extract the following:—"I send by my excellent young friend, Dr. Parks, of this city, what I hope will prove only the first instalment of the American contribution to the Hunter memorial—viz. £45. Perhaps you may be aware that at the late meeting of the American Medical Association, a National Committee was appointed to collect for the Hunter Testimonial. The money I now send by this opportunity (although it will be a part, I trust, of a large fund) was collected in the 'Old Bay State,' without reference to the nation." Mr. Weekes, the eminent sculptor, has already commenced his work, and from what we know of him, there is no doubt the subject in question will be one of his happiest efforts.—*British Med. Jour.*

Progress of Medical Science.

OPHTHALMOLOGY.

By HENRY D. NOYES, M.D.

Sudden Blindness caused by Emboli of the Arteria Centralis Retinae.—Prof. von Graefe records a case of this kind in *Archiv. für Ophthalmologie* vol. v. part 1, which beautifully illustrates the doctrines Virchow so ably advocates respecting the mischief sometimes caused by coagula or bits of lymph floating in the circulation. The case is entirely novel in the records of ophthalmic pathology. A coachman received a violent blow upon the breast with a carriage pole; for two months he was laid up with pain, dyspnoea, and had two occurrences of hæmoptysis. After he had resumed his duties he discovered that a cloud came over the right eye, which deepened until in a few minutes the eye became sightless. When examined with the ophthalmoscope, the only abnormal feature was found to be extreme diminution of size of the vessels passing through the optic nerve entrance, indicating a cessation of the circulation. The arteries were collapsed in their whole extent, the veins also empty of blood, except when traced towards the ora serrata. The refractive media were transparent, and the structure of the optic nerve unaltered. The choroidal circulation was not disturbed, nor was the external appearance of the eye altered, excepting a little sluggishness in the contractions of the pupil.

This tenuity of the blood-vessels is common in morbid processes of months' or years' duration in various forms of amaurosis—but in such cases the optic nerve becomes atrophied or opaque. But in this case the blindness was sudden and the optic nerve normal. Pressure upon the vessels by a tumor, or an effusion into the optic sheath, would obliterate the calibre of the arteries but distend the veins, and since the choroidal circulation was unaffected the obstruction must be within the orbit, and not in the cavity of the cranium.

Examination of the heart discovered a strong systolic murmur audible in the whole cardiac region, but loudest at the second intercostal space. The diagnosis of endocarditis, with thickening of the aortic valves, was confirmed by Prof. Traub. From this was deduced the more interesting diagnosis of emboli of the arteria centralis retinae as the cause of patient's blindness—that is, a small particle of lymph which had been exuded upon the internal surface of the left heart, or upon the aortic valves, had been swept away by the circulation, and became lodged in the right arteria centralis retinae. The patient was kept under observation in Prof. von Graefe's clinique for four weeks. A kind of peristaltic circulation was established after a few days in a few of the veins of the retina, but the current of blood was not re-established. The retina in its central portions became opaque by infiltration into its substance.

The treatment adopted was cupping from the temples (without benefit), paracentesis oculi, and finally iridectomy; the retina recovered its normal transparency, but the vessels continued impervious, and patient only gained perception of light upon the temporal side of the visual field. The systolic murmur persisted, and a diastolic murmur was also heard indicating insufficiency as well as roughness or rigidity of the aortic valves.

Ophthalmoscopic Appearances in Bright's Disease (*Ophthalmoskopischer Befund bei Morbus Brightii*). By DR. LIEBREICH of Berlin. *Archiv für Ophthalmologie*, B. v. Abth. ii. 265, 1859.)

Amaurosis from Fatty Degeneration of the Retina originating in Bright's Disease. By DR. MACKENZIE of Glasgow: *Ophthalmic Hospital Reports*, No. x. 181.

The Fatty Degeneration of the Retina. *Die fettige Degeneration der Netzhaut.* By DR. A. NAGEL. *Archiv für Ophthalmologie*. Bd. vi. Abth. i. 191. 1860.

The two first of the above papers describe the grosser

appearances of the retina as seen by the ophthalmoscope. Without dwelling upon them as they have been often described, they may be enumerated as Dr. Liebreich details them, as in the first place consisting of hyperæmia of the retinal vessels, especially of the veins; then a slight loss of transparency in the retina; the optic nerve disc becomes reddened, and its border indistinct; then appear the white specks and patches scattered over the fundus in the vicinity of the optic nerve: lastly, extravasations of blood usually take place upon the white spots and upon the apparently unaltered portions of the retina. The white points in their early condition have a bright glistening color, while at a later period they may become dead white. They increase in number and coalesce until often a large surface presents this white appearance. The borders of the white figures are not sharply defined, nor marked by deposits of pigment as in choroidal atrophy, but the edge fades gradually into the adjacent red color of the choroid, and minute points or dots of opalescent white are seen lying outside the large figure, like the outposts of an encampment. Dr. Mackenzie observed some of the white depositions lying plainly in front of the retinal vessels and not behind them. Dr. Liebreich calls attention to the greyish opacity of the optic papilla and the retina adjacent to it, forming a more deeply colored circle of two or three times the diameter of the normal optic entrance; this phenomenon is not constant. He also directs attention to the peculiar appearance of the yellow spot when it becomes the seat of the white deposit; that the plaque does not present a uniformly white color, but is rippled as it were with dark shadows, or appears like a group of stars with their rays blending together.

Upon the nature of this morbid process in the retina we have some interesting investigations in the paper of Dr. Nagel, which treats of the microscopic appearances. He does this elaborately in forty-three pages, rehearsing also the studies of Virchow, Wagner, Heyman, Müller, and others. It has been usual to call this disease fatty degeneration of the retina, and in the final result this is found to be correct. But the manner of occurrence of the fatty change has not been generally agreed upon, nor is fat the only adventitious product.

In a preparation which for six weeks had been immersed in a solution of chromic acid, Dr. Nagel could see that the fat drops or molecules were contained within a cell, which possessed a nucleus—that by increase in quantity of the fat, the cell was burst and the oil drops liberated. These fat-containing cells were found not only in the white patches, but in parts of the retina which were unchanged in color. To the normal elements of retina fat molecules were found adhering, as upon the walls of the capillary vessels, and the radiating fibres of Müller. Besides fat, another abnormal product was found, namely fibrine, mingled with the deposits of fat. In these situations the retina was seen, upon vertical section, to be increased in thickness, and its normal elements disturbed and broken up. The deposits of fat and fibrine were most abundant in the granular layers, while among the rods and cones little was found. The nature of the diseased process Dr. N. believes to be inflammatory, that the cells are exudation corpuscles produced by transformation of the nuclei of the connective tissue of the retina. The presence of fibrin points distinctly to the supposition of an inflammatory process. The hyperæmia and apoplexies are readily explained as the accompaniments or the consequences of the foregoing changes. The extravasations take place in the cases of Bright's disease without hypertrophy of the heart as well as in those with it;—they arise from the local congestion of the retinal vessels.

An important fact asserted by Dr. N. is, that the above changes in the retina he has found in cases where there was no renal disease whatever; in a case of acute meningitis and in a case of retinitis caused by the presence of a cysticercus in the eye; these cases argue strongly for an inflammatory process in the retina in Bright's disease, as opposed to a process of simple degeneration or atrophy. The nervous elements of the retina all undergo destructive changes,

the optic nerve fibres, the ganglionic cells, the granular layers and the rods and cones.

Dr. Mackenzie and Dr. Nagel concur in assigning the presence of urea in the circulation as the cause of the retinal disease; acting as an irritating poison especially upon the organs of vision, the brain, and the heart. In the eye no other lesions have been found than those pertaining to the retina; the choroid and the transparent media are unaffected.

Degeneration of the Retina from diffused Nephritis. *Archiv für Ophth.* B. vi. Ab. ii. 277.)—Prof. Graefe was invited by Prof. Traube to see a patient in the Charité Hospital, who had well recognised Bright's disease, and who upon the preceding day had suddenly become blind. The power of vision had in some measure returned at the time of the examination with the ophthalmoscope, and nothing abnormal could be discovered in the fundus oculi. The patient could not perceive daylight when the blindness first occurred, and it was attended with headache, a glow of heat, dyspnoea, etc., which symptoms were followed in seven hours by convulsions. After two days sight was restored. In four weeks another attack of uræmic convulsions took place, preceded by blindness that lasted for another two days. The visual power from this time gradually diminished, although no more acute uræmic attacks occurred, and now for the first time could the ophthalmoscopic signs of retinitis be discovered. There was strong distension of the retinal veins, a bluish grey infiltration into the retina adjacent to the optic nerve, and minute apoplexies scattered over the field; moreover, the vitreous humor became a little hazy. The usual developments of patches of fatty deposit and increasing amaurosis followed, until the patient died.

This case presents two forms of amaurosis, which may happen in Bright's disease: the one from acute uræmia, the other from retinitis, the consequence of the chronic uræal poisoning. Among thirty-two patients with nephritic amblyopia, in thirty Prof. von Graefe found the usual retinal changes; in the other two there were none, but there were decided uræmic symptoms. Six patients who had the retinal degeneration also had uræmic convulsions, and with them temporary blindness. To distinguish between these two forms of amaurosis is easy, when the possible intrusion of acute uræmic poisoning is borne in mind.

The retinitis takes place generally in the latter stages of the renal disease, namely, in the period of shrinking of the kidney. There may be improvement in the retinal affection without any improvement in the kidney disease: in three patients has Prof. von Graefe seen the white patches and other lesions of the retina entirely disappear, and the functions of the retina restored. In treatment he relies upon bloodletting from the temple, by Heurteloup's artificial leech, and after each application he confines the patient to a dark room for twenty-four hours, to prevent reaction; this confinement to a dark room for a day, after topical bloodletting, is his usual practice in all cases of deep ocular congestions.

Microscopic Examination.—In the above case the eyes were examined after death by Dr. Schweigger, who is the microscopist in Prof. von Graefe's clinique; and from this and other examinations made by him, the following lesions are discovered. He finds them in the retina, in the choroid, and in the vitreous humor.

In the retina the alterations may be divided into two series: first, those belonging to its nervous elements; secondly, those of the areolar tissue which separates and also connects the nervous elements. The second series of phenomena are those seen by the ophthalmoscope—the first series are seen mainly by the microscope alone. The changes in the apparatus of connective tissue consist chiefly in hypertrophy and in fatty degeneration, sometimes also in sclerosis (induration). Hypertrophy affects mostly the connective tissue of the optic papilla and its fibres as they are spread out in the retina. Fatty degeneration takes place mostly in the connective tissue of the deeper parts of the retina, viz. of the granular layers. Cells of new formation (exudation corpuscles?) are found in the hypertrophied connective tis-

sue, and these fall into fatty degeneration. Effusion of serum and of coagulable lymph takes place, and aids in rendering the retina opaque.

The second series of changes, namely, those of the nervous elements, have been best studied in the optic nerve fibres. They consist in swelling, sometimes by saturation with serum, in varicosities, and in sclerosis. That the nerve fibres degenerate into fat globules is not easily discerned—this change belongs principally to the connective tissue. In the layer of rods and bulbs, and in the other nervous elements, alterations similar to those of the optic nerve fibres can be seen, but it is hard to study them separately. In the optic papilla there is a great development of fine capillaries. In the choroid coat the chorio-capillaris undergoes sclerosis, that is, the walls of the vessels become thickened, and their calibre diminished, sometimes completely obliterated. The pigment epithelium loses some of its contents, and becomes partly decolorized. The vitreous humor was affected in only one case—in it were numerous delicate threads woven together, which at the surface of the vitreous humor broke down into molecules.

With these facts of the microscope before us, it is easy to understand the impairment of sight. The conducting power of the optic nerve fibres is injured by compression from hypertrophied connective tissue, and by the essential alterations of the fibres; slight opacity of the vitreous humor obstructs the entrance of the light; the globules of fat in the middle layers of the retina, by reflecting the rays, prevent their reaching the subjacent rods and bulbs (Jacob's membrane). The possibility of occasional restitution of sight is explained by knowing that the fatty degeneration belongs mostly to the connective tissue, and should the fat be absorbed, vision may return if there have not been essential disorganization of the optic nerve fibres. This happy result is but too rare, and, at best, temporary.

Remarks upon Sporadic and Epidemic Diphtheritis Conjunctiva.—(*Bemerkungen über Sporadische und Epidemische Diphtheritis Conjunctivae*). By Dr. J. JACOBSON. (*Archiv für Ophth.* B. vi. Ab. ii. 181-209.)

Upon Diphtheritic Conjunctivitis and the Employment of Caustic in Acute Inflammations. (*Ueber die Diphtheritische Conjunctivitis und die Anwendung des Causticums bei akuten Entzündungen*). By Dr. A. v. GRAEFE. (*Archiv für Ophth.* B. i. Ab. 1. 168-250.)

In number IX. of "Ophthalmic Hospital Reports," Mr. Hutchinson relates a case of "Diphtheritic Ophthalmia," in which there was abundant exudation of fibrin upon the ocular mucous membrane and subsequent collapse of the globes by bursting of the cornea. This manifestation of diphtheria would appear not to be so common in England or in this country as it is in Germany. Dr. Jacobson reports having seen among two thousand patients, in five years, forty sporadic and twenty-two epidemic cases. The sporadic cases were mostly among children, and much milder than the epidemic cases. In none was there panophthalmitis, and in very few did the cornea lose its transparency. In the epidemic cases the disease was more destructive, viz. of the twenty-two, five eyes were destroyed, four had adherent leucomata, six more or less extensive opacities of the cornea, four escaped injury, and three cases of pannus were benefited by the improved clearness of the cornea after the disease had subsided:—that is to say, two-thirds of the patients suffered detriment to vision. This epidemic was in the summer of 1859, when diphtheritic sore throat, erysipelas, and carbuncles were prevalent, and when open wounds would be covered with plastic exudation. Cases of ordinary blennorrhoea neonatorum almost entirely disappeared. In only five patients of the twenty-two epidemic cases were both eyes affected—and in none of them were there other out-croppings of diphtheria—the affection was purely local. The access of the disease was various; in some it was with no vascular congestion or increased secretion, but merely with yellowish-grey infiltration in the conjunctiva of the lid, in patches the size of a pea; in other cases there was great chemosis of the sclerotic conjunctiva,

patches of lymph and very slight congestion of the vessels—most frequently the introductory symptoms were those of blennorrhœa of an intense degree. Within twenty-four hours the eyelids became remarkably stiff and hard, very painful when handled, so that, to evert them, chloroform sometimes was needed. The conjunctiva, although increased in thickness, was but little hyperæmic, and displayed not a red, but a greyish-yellow color. The plastic exudation could sometimes be peeled off the surface as a membrane, at other times it was incorporated in the texture of the conjunctiva. This stage would persist about a week, and then the lymph being cast off or melting away, the cases presented the features of ordinary purulent conjunctivitis. The cornea became affected, sometimes at the very commencement, either by ulceration, or by a grey dead opacity that speedily advanced to sloughing. Iritis and panophthalmitis followed only as the result of perforation or necrosis of the cornea; without this the deeper parts of the eye did not suffer.

In treatment, Dr. Jacobson denounces the use of caustic; mercurials were without benefit, and leeches would not mitigate the pain. He resorted to the constant application of iced water day and night, incisions into the conjunctiva, and when the cornea became implicated, instillation of sulphate of atropine and repeated evacuation of the aqueous humor. That Dr. J. did not resort to general remedies, except calomel, is not surprising when it is remembered that the diphtheria did not, in these patients, show itself in other parts of the body.

The paper of Professor von Graefe, published in 1854, is too lengthy for condensation; it is a masterly exposition of the disease, and after the lapse of six years little could be added to make the delineation more perfect. He saw it as part of a constitutional malady, most frequently epidemic, attacking children between one year and eight years old most frequently, not attacking neonata. He pronounces the conjunctival diphtheritis contagious. He divides it into three stages:—1st, That of exudation. 2d, The blennorrhœal. 3d, That of contraction of the conjunctiva. The diagnosis between diphtheritic and purulent inflammation of the conjunctiva is broadly defined—although the first passes into the second. In the period of exudation he relies upon the constitutional effect of mercury, but begins the local use of nitrate of silver as soon as the blennorrhœal stage sets in. The number of cases he had seen at that time was forty.

DR. ADDISON.—His whole thoughts were concentrated on his business; and being a man of wonderful shrewdness and acumen, he was eminently the practical Physician. This is the term, by which, above all others, he would no doubt have preferred to be distinguished. All who knew him must remember how strongly this word *practical* was insisted on by him in the study of disease; it is, indeed, the word which constitutes the key to Addison's whole character and professional career. He was not adverse to novel theories, and was always ready to discuss them; but he never for a moment allowed them to stand in the way of his more matured experience. Having immense perceptive powers—being shrewd and sagacious above the average of men—when he had his patient before him he looked him through and through, so that few diseases could escape his penetrating glance. He never reasoned upon a half-discovered fact, but would remain at the bedside for a period which would often weary his class, determined to search out the malady to its very bottom. If he could then lay his finger on the seat of the disease his victory was complete. Diagnosis was his forte; and those who knew him best are aware that he stood unrivalled in his power of searching into the complex framework of the body, and dragging the hidden malady to light. When this was done, we fear that nearly all was accomplished; for his very meagre and simple prescriptions (if he remembered to prescribe at all) showed that he made no study of therapeutics. —*Med. Times and Gazette.*

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON SURGERY.

DR. JAMES R. WOOD, President.

RESECTION OF JOINTS.

TWO CASES OF EXSECTION OF THE HEAD OF THE FEMUR IN MORBUS COXARIUS. BY DR. WM. HENRY CHURCH.

(Continued from page 159.)

CASE 1.—Michael Tiffany, seven years of age, has been suffering from morbus coxarius of the left hip for one year—consequent upon a fall. An abscess formed which opened spontaneously, about the sixth month, on the outer side of the thigh at the junction of the middle and upper thirds. The pain is so severe that he supports the limb between his hands the greater part of the twenty-four hours, never sleeping without holding it in that manner. Discharge profuse, steadily reducing his flesh and strength.

Oct. 16th, 1859.—Operated with the advice and assistance of Drs. Alex. H. Stevens, Hossack, Gescheid, and A. L. Sands. The patient being under the influence of chloroform, cut down over the trochanter major. After dividing the capsular ligament, the ligamentum teres having been destroyed by the disease, the head of the bone was easily thrown out of the cavity of the acetabulum by flexing and adducting the limb. Finding that the diseased bone was limited to the head of the os femoris, it was removed by sawing through the neck, at its junction with the shaft. The os innominatum perfectly healthy. A probe can be passed, by the original opening in the integuments, through the abscess and a small perforation in the inferior portion of the capsular ligament, into the cavity of the acetabulum, proving that the pus had escaped from the joint through this, the only opening in the capsular ligament.

Oct. 17th.—Slept well, and is more comfortable than he has been for months. Feb. 20th, 1860.—The patient has progressed favorably without one bad symptom. External wound closed. Can rotate, flex, and extend the thigh upon the pelvis. April 1st.—Allowed to go about on crutches. April 20th.—Limb shortened one inch. Can touch the floor with his heel. May 16th.—Seven months after the operation. Has thrown away the crutches in disgust. The swelling of the limb having subsided, there is apparent atrophy of the muscles of the thigh, his lameness evidently disappearing as they are developed by use.

CASE 2.—Barney McGowan, native of New York, æt. 17 years. Admitted to the Bellevue Hospital, Nov. 28, 1859. His constitution is feeble, and together with anæmia he presents indications, such as cicatrices of cervical abscesses, of a truly scrofulous diathesis.

Previous History.—When a lad of five years he fell into a cistern, injuring his left hip; consequent upon which he has been lame in the left limb. Up to that time there existed no trouble in his hip, and indeed since, he has had no acute suffering. Exercise of a violent kind, or gentle exercise long continued, induces a marked exacerbation of his malady. Twelve months before admission he fell on the ice, striking the lame hip, and could not walk home. From the effects of this fall he recovered in a few days. Six months ago his hip became so swollen and tender that he could not walk. So he entered the hospital.

Symptoms on Admission.—Marked deformity about the hip-joint; considerable swelling, limb shortened two and a half inches, knee flexed, pain on moving the thigh upwards or outwards; adduction of the thigh, and slight inversion of the foot.

Treatment.—Further examination in a few days led to the discovery of pus on the inferior inner portion of the thigh. Incisions were made, and a free discharge of pus took place;

ever since that there has been a continual discharge from the opening made. Fistulous openings on the inner border of the thigh, above the incision, also made their appearance and discharged pus.

Diagnosis.—Every thing, the condition of the patient, the appearance of the joint externally, points to morbus coxarius. The general health of patient endeavored to be built up by tonics, stimulants, and nutritious diet, but despite of all medication he continued to fail.

Jan. 16th, 1860.—After due consultation exsection was determined on. The operation consisted in cutting down upon the shaft of the os femoris, the head and neck having been destroyed by the disease. The upper end of the bone was removed half an inch below the junction of the neck with the shaft, where the tissues were found in a healthy condition. Portions of diseased bone were cut from the borders of the acetabulum, but the os innominatum was so extensively involved in the disease that a favorable result could not be hoped for.

Patient's pulse, day of operation, 120, and very feeble. The next day, 9 A.M., pulse 100 and stronger. Patient for two weeks appeared to be getting stronger; the wounds were dressed daily with straps, then with balsam Peru, then with zinc salve. Never, however, would the whole heal up; at the lower end of the incision, and on the inner border of the thigh, there continued fistulae which discharged somewhat of pus every day. A gradual decline set in about the middle of March, 1860, which continued up to his death. For although brandy, punch, eggs, milk, now and then oysters, quinine, and iron were all administered, he gradually failed and died of exhaustion May 17, 1860.

A post-mortem examination was not allowed, other than an incision from the left dorsum ili, down to the middle of the femur. By a *liberal interpretation of this incision*, we succeeded in removing the os innominatum and upper third of femur together. The os innominatum was very much diseased, the acetabulum being perforated, and broken in three pieces. The femur, at point of exsection, was rounded off, and attached to acetabulum by fibrous tissue; no other attempt at union. A large abscess beneath the pelvic fascia discharged itself through the fissures in the acetabulum into the sinus on the other border of the thigh.

Remarks.—As in Mr. Textor's case of resection of the humerus there "was a formation of new bone to articulate with a small depressed portion of the glenoid cavity of the scapula," so in this case there was a small disk of new bone on the side of the shaft formed apparently to articulate with the lower border of the acetabulum. Again another point in his case, where there was formation of new bone for the attachment of the long head of the biceps, the end of the bone was rounded off very like the trochanter major, perhaps to form new bone for the attachment of the gluteal muscles.

Fibrous adhesions existed between the upper end of the shaft of the os femoris, and the crest of the acetabulum, leaving only one point at its lower border, through which the finger could with difficulty be introduced into its cavity, allowing free motion to the os femoris, but yet holding the end firmly in its new position.

Mr. Wagner of Berlin says we must be cautious in drawing conclusions after operations upon animals, as the ratio of mortality would be fixed exceedingly unfavorably for resection, inasmuch as nearly half of the rabbits which I operated upon died. It would be assumed that in most cases, after resection of the head of the humerus, inflammation of the pleura, pericardium, or lungs, would be set up, as I have found to be the case in rabbits. I quote Mr. Wagner's remarks, from having, in a case of morbus coxarius, opened the abscess, where in a day or two the patient was seized with acute pericarditis, which proved fatal. I believe that these operations upon the hip and shoulder joints will be attended with better success than those upon any other joints, where anchylosis is desired, for the reason that the denuded surfaces of the bones are not obliged to come in contact with each other, and by friction or pres-

sure produce new disease. If this should prove true, operations upon the knee-joint will be the most unsuccessful. Wagner says, "anchylosis of the shoulder-joint after resection has not been observed up to the present time."

Has anchylosis yet occurred after the same operation on the hip-joint?

Correspondence.

APOPLEXY—AUTOPSY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

JAN. 7th, with Dr. Rochester, of Buffalo, I made a post-mortem examination on T. G.—, aged about 50, colored, dropped down dead this morning soon after rising. External appearances natural. The xiphoid cartilage was unusually high up, and the cartilages of the ribs passed off from it in a very oblique manner, not so rounding and protecting to the stomach as usual. The heart was pressed up, being situated between the first and fourth ribs—commencing close against the lower edge of the first and extending to the lower part of the fourth rib. Liver healthy in appearance, but pressed to the left and somewhat enlarged. Gall bladder full. No kidney on the left side, and that on the right not apparently enlarged, though it was congested in a marked degree. Heart healthy externally, both sides empty, left ventricle slightly enlarged, and perhaps walls somewhat thinned. Head—skull very thick. Dura mater externally dry. Lymph effused over a large part of right and left sides of cerebrum. Lateral ventricles filled with bloody serum. Choroid plexus congested. Found a thick black clot of considerable size on both sides of brain in the sulci between the lateral ventricles and the meninges, a small clot over olfactory nerve of right side, and at the base of the cerebellum marked clots near the cord—one or two spots softened. General mass of brain firm and healthy. The patient had been somewhat of a drinking man, and for a day or two had complained of pain in the head, referring it to the anterior and lateral parts, those that on examination showed the effusion. The body was of good full size, of strong build, rather than corpulent, with average sized head and neck. It was not ascertained whether the disease was hereditary. It will be perceived the effusion in this case had taken place where it is most often observed, i.e. over the optic nerve, or on a level with it. It is interesting to note in connexion with the apoplectic condition, the anatomical peculiarities that were present; the displacement of the heart with hypertrophy, absence of one kidney, flatness of the attachment of the ribs, etc. Impediment to the free transmission of blood through the heart and lungs predisposes to apoplexy. Dr. Hope, from the frequency of the occurrence of hypertrophy of the left ventricle in these cases, was disposed to place them in the relation of cause and effect, but Watson inclines to the belief that they are concomitant effects of the same cause, viz. of disease pervading the arterial tree. The causes of the attack in this case may be briefly summed up as age, hypertrophy of the left ventricle, cold, intemperance, and possibly the displacement of the heart. It is not impossible the enlargement of the liver may have had some effect to produce retardation of the aortic current, and thus in some degree increased the tendency to cerebral engorgement. It would be interesting to know what effect the absence of one kidney may have in such cases. Possibly from offering less facilities for the diminution of the water and urea from the system, it might in the case of a spirit drinker, or of one accustomed to overload the stomach, account for an occasional temporary coma, or even congestion of the brain. That this may operate as one of the causes in cases of the kind seems quite likely, and affords no considerable field for speculation.

W. H. BUTLER, M.D.

EAST SAGINAW, AUG. 20, 1860.

FOREIGN CORRESPONDENCE.

Letter from DAVID P. SMITH, M.D.,

EDINBURGH.

Scotland, August 6, 1900.

LEAVING the steam-ship Arabia Saturday noon, at Liverpool, I made the best of my way to Edinburgh, where I arrived Saturday night, August 4th. Placing my professional duties foremost, I, this morning, called upon Dr. Wm. Husband, who has recently practised and advocated vaccination upon a new, simple, and very efficient plan. He received me with the utmost kindness, and, in the course of our conversation, instructed me fully in his new method, which is simply this:—On or before the eighth day after a successful vaccination, by slightly rupturing the vessel, and dipping therein a delicate capillary glass tube, virus sufficient to vaccinate several people ascends into the tube by virtue of the capillary attraction; then withdrawing the tube and slightly shaking it, so that the virus may be brought into the middle, both ends are, in succession, hermetically sealed by being held in the flame of a candle until the end melting assumes a globular form. This process is all that is necessary to be done to procure and preserve the virus. When about to use it, all that is required is to break off both ends of the tube, and, slightly abrading the arm in one, two, or three places, to blow upon these surfaces a drop or two of the fluid. Can any process be more neat or simple? Dr. Husband assures me that nine out of every ten vaccinations "take," and that having employed tubes that were charged two years ago, their efficiency remains unimpaired. The tubes used are very fine and about three inches long.

Riding to the Royal Infirmary at 12, I there saw Prof. Syme. On being shown a case of ununited fracture of the humerus, I called the attention of the Professor to the views of Prof. F. H. Hamilton, as to the cause and treatment of that complication of fracture when occurring in the humerus. They are briefly this:—That the cause of the non-union is temporary the ankylosis of the elbow-joint, which, occurring when the arm is in a bent position, causes much, but hitherto unsuspected, motion at the seat of fracture, and that the treatment should be to straighten the arm and apply to it a straight splint expending from the shoulder to the tips of the fingers; and then perform any operation at the seat of fracture that may be thought necessary. Prof. Syme also showed us a patient who, when suffering from popliteal aneurism, had pressure faithfully tried without any result, in Manchester. The femoral artery was then tied with the effect of curing the aneurism. Some time after this, and subsequently to a severe blow upon the knee, the foot began to mortify, and finally dropped off in the line of Chopart's operation. At this time Prof. Syme amputated at the ankle-joint, and, as he said, contrary to his anticipations, the stump was nearly healed. Remarkings upon fractures, and the American method of making extension, and sometimes both extension and counter-extension by means of adhesive plaster, Prof. Syme maintained stoutly that the benefit supposed to be gained from the use of extension, was an entire delusion; for if extension was employed, the muscles were roused to resistance and always overcame such force;—I ventured to suggest that, in our country, it had been found that extension, judiciously used and carefully applied, was of great value, and that his prejudices against its use arose from seeing it improperly and rudely applied. It was, however, evidently a foregone conclusion in his mind, and all argument in its favor was useless.

I spent much of the day, and also dined with Professor Simpson. I was struck with the great activity of his mind, and the ease with which, in almost one breath, he would discuss subjects entirely opposite. His geniality and, as it were, playfulness of mind, together with his great kindness to strangers, render his hospitalities delightful. He was much interested in an account that I gave him of the improvements in the treatment of morbus coxarius in our

country. I shall take an early opportunity to show the Professors here Dr. Sayre's instrument. It appeared to me to be such a marked improvement, when I saw it at the National Medical Association, and heard it so ably commented upon, that I procured it, and have it with me. Professor Simpson kindly showed me his method of performing acupuncture. He takes a needle threaded with a wire, and, deeply imbedding it in the tissues on one side of the artery, makes its point issue so that it may pass above the artery, and then thrusting it down deeply into the tissues on the other side of the vessel, it appears to be able to control perfectly vessels of any size. He remarked that it had been used in several amputations of the thigh with perfect success. The wire is used merely to draw out the needle when it has remained a sufficient length of time—24 hours have sufficed. What time or rather about what time the needle should remain has yet to be determined. A case was shown me where Prof. Simpson had performed the operation for vesico-vaginal fistula, the day previous. He remarked that he had eleven cases in which he had performed only eleven operations with perfect success in all. A case presented itself of nasal polypi, interesting from the fact that it had been in existence for 24 years. The gentleman told me that Mr. Liston operated upon him some fifteen times, twenty years ago, causing much hemorrhage and loosening one of his molar teeth. The growth remaining and increasing, about four years ago he applied to Prof. Syme, who removed it several times, and, as the growth immediately returned, advised him to let it alone. He did so, and at the present time it is much less than four years ago, although plainly perceptible on distending both nostrils. He carries constantly in his pocket a vial of copperas dissolved in water, which by causing contraction of the mass relieves him materially. Prof. Simpson suggested the application of chloride of zinc.

At the Infirmary, to-day, Prof. Syme remarked that there had recently been two cases of aneurism admitted to the Infirmary for operation, in which pulsation ceased the day after their admission, and prompt recovery followed without anything being done. He attributed it to the fright and anxiety consequent on the journey and admission to the hospital, which might have caused some mechanical or other change in the aneurism. He considered the treatment by flexion well worthy of trial in almost every case. Prof. Syme remarked that blistering was the very best thing that could be done for a callous, indolent ulcer; and he wished particularly the credit of urging this improved treatment upon the profession. A poultice is usually applied for the first twenty-four hours after admission to the hospital; then the blister. I noticed in the wards that fractures of the tibia and fibula were all laid upon the outer side. My attention has been called by Mr. Edwards, formerly Demonstrator of Anatomy in the University, to the subject of fractures of the radius just above the wrist. It appears to him, and certainly does to me, after experiments upon the dead body, that far too much importance has been attached to the forcible bending of the hand downwards, and to the ulnar side. Any one who tries the experiment upon the subject will find that it really prevents the close apposition of the fractured surfaces. A gap is produced whenever the hand is forcibly inclined in the usual manner. May not the filling up of this gap with new deposit in some way help to produce that stiffness and awkwardness of the joint that so often remain for months. I remember that Prof. F. H. Hamilton, in his late excellent work on fractures, doubts very much the efficacy of the above-mentioned posture, and, if I mistake not, retains it merely on account of the superior facility that it gives you for examining the point of fracture.

Many operations are daily performed at the hospital, or, as it is called here, Royal Infirmary, that I do not mention, because they present nothing of interest. Warm water is used here instead of cold, as an application to wounds, sprains, and contusions. Prof. Simpson remarked to me that he doubted the propriety of employing even warm water as an application to a surgical wound. He thought

it might dissolve the crust or glazing formed over a wound, and thus do more harm than good. Prof. Syme amputated the leg by making anterior and posterior skin-flaps, and dividing the muscles by circular incision. In sawing the bone, he divides the spine of the tibia obliquely, so as to prevent fretting of the anterior flap by the sharp corner. This, however, is no novelty.

Medical News.

SMOKERS IN NEW YORK.—According to the *Merchants' Magazine*, in New York city there are about 200,000 smokers, each using two cigars per diem, which make 400,000 every day. These will cost, for labor alone, at \$5 per thousand, the enormous sum of \$8,760,000 annually, when made by hand. There are imported into New York, annually, 12,000,000 lbs. of tobacco, distributed as follows:—Connecticut, 10,000 cases of 400 lbs. each; Pennsylvania, 6,000 cases, 400 lbs. each; Ohio, 10,000 cases of 370 lbs. each. From New York to Massachusetts, 5,000 cases of 400 lbs. each. We also import 6,000,000 lbs. from Havana, and a quantity from other Spanish ports: and we are told that, on an average, 20 lbs. of tobacco are required for every 1,000 cigars, and we can easily calculate that there are 900,000,000 cigars made in the city of New York alone in a year.

From an article in the London *Times* it appears that from the first of June, 1857, to the first of June, 1858, there had been admitted into the Northern hospital at Liverpool upwards of 150 patients from merchant vessels whose sufferings in every single case were owing to maltreatment at the hands of their officers.

MEDICAL MEN IN THE NEW ITALIAN PARLIAMENT.—The Medical Profession is represented in the New Italian Parliament by twelve Medical Deputies, and among them G. Farini, ex-Governor of the Æmilian Provinces. Two of the principal representatives of Italian Medicine, Professor Panizza, of Pavia, and Bufalini, of Florence, have been named Senators. Well merited has this recognition of their public services been: for it has been among the Professors at the Universities that the traditions of Italian liberties were chiefly kept alive during the oppression from which they have now happily become liberated.

CAUSE OF STERILITY.—Dr. Chaillé who lately visited New York, writes to the *N. O. Med. and Surg. Journ.* as follows: Dr. Emmet, Assistant Physician to the Woman's Hospital, supposes, and I presume his opinion reflects that of Dr. Sims, that copulation seldom results in conception, unless the os uteri be in such a position as to fairly receive the discharge of semen from the meatus urethrae of the penis. If the impulse of the semen in the act of coition be not directed fairly into the womb's mouth (in consequence of its faulty position), then sterility may result. Dr. E. asserts that, notwithstanding those exceptional cases where pregnancy has occurred without even penetration of the virile member, it is none the less true that the wives of those men who have had an abnormal termination of the urethra (the meatus being situated, not on the glans penis, but somewhere in the course of the urethra), have been sterile, which would tend to establish the assertion that impregnation usually requires something more than the simple introduction of semen into the vagina.

BRESCIA, a city of Lombardy, of 30,000 inhabitants, received in the first days after the horrid carnage on the heights of San Martino and Solferino, the enormous number of 33,000 sick and wounded, who were distributed in forty different provisional hospitals. Churches, barracks, the vast palaces of the rich, monasteries, school houses and country residences were charitably thrown open for the relief of the sick and wounded. The physicians were nobly

assisted by the inhabitants in their arduous task, and both did their best to afford every possible help and comfort to the soldiers wounded on the battle field. To give an idea of the immense labor the surgeons had to undergo, we add that their number amounted to only 140, and that they were occupied continually during fifteen hours of the day. Of the above mentioned number of 33,000, there were 13,250 wounded on the battle field by all possible kinds of arms; 19,750 being medical cases. According to nationality this divides itself into 17,400 Frenchmen, 14,000 Italians, and 1,600 Austrians. The amount of deaths was 1,270, which gives the favorable result of not quite four per cent. of the total amount treated.—*N. O. Medical and Surgical Journal*.

SPECIALTIES OF THE PRESENT DAY NO NOVELTY.—The system of special practice, which is becoming so prevalent at the present time, existed amongst the ancient Egyptians, for Herodotus speaks of their having doctors for almost every part of the body, of which the eye and other organs are particularly mentioned. Our specialism would seem, then, to be merely a revival of an ancient though not enlightened practice.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 25th day of August to the 1st day of September, 1880.

Deaths.—Men, 86; women, 81; boys, 198; girls, 164—total, 529. Adults, 167; youths, 32; children, 235; males, 279; females, 245; colored, 7. Infants under two years of age, 233. Among the causes of death we notice:—cholera-infantum, 106; congestion of brain, 8; infantile convulsions, 37; croup, 3; diarrhoea, 27; dysentery, 5; scarlet fever, 21; typhus and typhoid fevers, 8; inflammation of brain, 7; of bowels, 5; of lungs, 5; measles, 5; small-pox, 6; consumption, 56; droopy of head, 24; infantile marasmus, 48; old age, 101. Classification:—brain and nervous system, 109; respiratory, 86; digestive, 200.

The number of deaths compared with the corresponding weeks of 1880 and 1859, and of last week, was as follows:—

Week ending Sept. 4, 1880.....	523	Decrease....	65
" " Sept. 3, 1859.....	581	"	57
" " Aug. 25, 1880.....	524	"	25

Aug. and Sept.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	°	°	°	°	°		0 to 10	In.
26th.	29.80	.06	73	66	79	10	15	W.	1	
27th.	29.63	.01	73	64	81	11	16	W.	0.8	
28th.	29.65	.03	68	61	74	7	9	N.W.	4	.04
29th.	29.90	.05	67	57	76	11	15	N.W.	.05	
30th.	29.83	.09	70	60	80	11	14	W.	.01	
31st.	29.73	.14	72	64	80	10	12	W.	3	
1st.	29.68	.14	79	58	80	10	14	N.W.	.01	

REMARKS ON THE WEATHER.—The driest week of summer, with pleasant weather both day and night, with the exception of a cloudy P.M., and light rain on the 28th. The force of the wind was also generally light during the week.

MEDICAL DIARY OF THE WEEK.

Monday, Sept. 10.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Taylor, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Sept. 11.	{ CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. AMERICAN PHARMACEUTICAL ASSOCIATION, at 3 P.M.
Wednesday, Sept. 12.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Meir, half-past 1 P.M. N. Y. PATHOLOGICAL SOCIETY, 8 P.M.
Thursday, Sept. 13.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Thomas, 12 M.
Friday, Sept. 14.	{ CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Sept. 15.	{ BELLEVUE, Surgery, Dr. Mott, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

Original Lectures.

A CLINICAL LECTURE ON ANÆMIA,
DELIVERED AT THE LONG ISLAND COLLEGE HOSPITAL,

BY

AUSTIN FLINT, M.D.,

PROFESSOR OF THEORY AND PRACTICE OF MEDICINE.

GENTLEMEN:—I shall avail myself of the opportunity offered by the absence of any particular cases claiming extended consideration to-day, to make some remarks on a pathological condition which is brought to our notice constantly in connexion with the cases presenting at our clinic, and which I have been able hitherto to consider only in an incidental manner. The condition to which I refer is that known as *anæmia*.

As introductory to the subject, I will call your attention to a case which we have recently admitted into the hospital. The patient is a female, aged twenty-three. Her occupation is that of a domestic, and she has been much confined within doors. She states that she has been in ill health for eighteen months, and that prior to this time she was well. She is unmarried. Eighteen months ago she ceased to menstruate. The menses were not arrested, but they ceased to recur for three months. She can assign no cause for this irregularity. She has never had leucorrhœa. After three months the menses returned, and have recurred regularly since, but have always been scanty. She presents a notably anæmic appearance. The face is pale, and the prolabia bloodless. The appetite is tolerable, and the bowels regular. She is depressed in spirits. She has suffered much from palpitation, and has fancied that she had disease of the heart, and that she is in danger of sudden death. On physical examination the heart is found not enlarged. A systolic soft murmur is heard over the pulmonary artery, and a feeble murmur (systolic) is also heard at the apex. A pretty loud arterial murmur is heard over the carotid, and a loud venous hum. There are no symptoms referable to the lungs.

These are the general points in this case. I do not care to go into needless details. The case may serve as a type of the condition of which I propose to speak more fully than I have been able to do before.

The patient is affected with *anæmia*. What is the pathological condition designated by this term? Derivatively the term signifies a deficiency of blood. But this does not express accurately the condition. I believe that there may be a deficient quantity of blood. It has been denied by some who think that whenever, from hæmorrhage, or any other cause, the mass is lessened, liquids are quickly absorbed sufficiently to make up the deficiency, and, therefore, that the quantity is never so much reduced as to constitute properly a morbid condition. As a general statement this is probably true, but it may be justly doubted whether it invariably holds good. That reduction in quantity of the mass of blood, however, is not the essential condition in *anæmia*, must be admitted. The essential condition is deficiency of the red corpuscles of the blood. Whenever these are reduced below the limit of health, *anæmia* exists, whether the blood, as a whole, be diminished or not! The condition is thus the opposite of plethora, the red corpuscles in the latter condition exceeding in quantity the healthy limit.

When I say that the essential condition in *anæmia* is a diminution of the red corpuscles below the limit of health, I would not be understood to mean that this is always the primary morbid change. Other important changes in the blood, with which we are at present unacquainted, may precede it. The source of the blood corpuscles is not yet satisfactorily ascertained. We know not where or how they are manufactured. When physiologists shall have

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pushed their researches further in this direction, we shall perhaps find that deficiency of the red corpuscles always stands in a relation of dependence on some antecedent blood change or changes. It is correct to say that, in the existing state of our knowledge, *anæmia* may be defined to be a paucity of blood corpuscles.

Physiological chemistry teaches us that the red corpuscles consist of several organic ingredients, prominent among which is the hæmatin or coloring matter of the blood, and that they are present in the proportion of from 120 to 130 in 1000 parts. Pathologists have ascertained that in cases of disease the red corpuscles may decrease so that they exist in a proportion of only 70, 60, and even 20 in 1000 parts. It is difficult here, as in other instances, to fix the precise bounds of healthy variations. Robin estimates that when the reduction of corpuscles falls as low as 80 in 1000 parts, it must constitute a morbid condition. This, however, is only an opinion, although approximating to the truth.

Directing our attention to the subject in a practical point of view, the question at once arises, How are we to determine the existence of *anæmia*? It is evident that we cannot draw blood from all our patients and make a quantitative analysis in order to ascertain whether they are *anæmic* or not. This is not necessary. For all practical purposes we can generally judge with sufficient accuracy by certain manifest characters, and by the pathological effects of this condition. The patient's physiognomy is often sufficient, as in the case which has prefaced these remarks. The characteristic appearance I have pointed out to you repeatedly in the patients at our clinic. The color of the face, so far as this is dependent on the hæmatin of the blood, is deficient. The complexion is that of the skin *minus* the hæmatin, and as the complexion varies in different persons, so the *anæmic* aspect is not always precisely the same. Some persons present a pale white color, in others the skin is brown, in others sallow, and sometimes a faint greenish tint is discoverable, which led the older writers to apply to certain cases of *anæmia* the name of chlorosis. The absence or deficiency of hæmatin is the point which they all have in common. The conjunctiva is notably white and transparent, showing when the complexion is yellow, that it is not so from the presence of bile in the blood. Owing to the transparency of the sclerotic membrane and the conjunctiva, the choroid coat frequently gives to the globe of the eye a dark blue appearance which is quite characteristic. The prolabia offer a good spot for judging of the condition of the blood. This intermediate space between the skin and mucous membrane, loses the vermilion line of health, and in strongly marked cases seems devoid of blood. The mucous membrane of the mouth, nostrils, and eyelids is unnaturally pale. With these appearances you are familiar, and I have had occasion to caution you against a liability to error to which I will again refer. Patients whom I examined privately before my clinical hour arrived, not unfrequently present the characters of *anæmia* strongly marked, but when they come before the class these appearances are much less manifest. The reason is, the excitement incident to offering thus in public, causes the heart to act with unusual force, and the blood is unduly attracted to the face. Allowance is to be made in private practice for the temporary excitement which the visits of the physician or his investigations are likely to occasion.

But we must not rely exclusively on the physiognomy in determining the existence of *anæmia*, or in judging of its degree. In some patients the characters just mentioned are not conspicuously manifest, and the same amount of *anæmia* in different patients gives rise to marked differences in the prominence of the physiognomic characters, owing to differences in the vascularity of the tissues in the natural complexion, etc. This is an important practical point which clinical experience shows to be correct. There are other means of judging, irrespective of an analysis of the blood. These have reference to the pathological effects of the *anæmic* condition. Clinical observation teaches that *anæmia*

stands in a pathological relation to a series of phenomena which, therefore, when present, constitute evidence of the existence of anæmia. These phenomena are important in a diagnostic point of view, and also with reference to therapeutics, for the relation which the anæmia sustains, as already intimated, is that of causation.

Before proceeding further I wish to remark that the importance of the anæmic condition has been appreciated only within the last few years. It is not yet sufficiently appreciated by many practitioners, especially those who have not been able to emancipate themselves from the doctrine that nearly all diseases are referable to inflammation, and that this is the great pathological element on which our therapeutical resources are to be in most cases concentrated. The recognition by well informed physicians of anæmia as an important pathological condition, is one of the most prominent of the characteristics of practical medicine at the present moment. Let me add, Gentlemen, that there are few subjects in practical medicine which it is more important that you should properly understand than this. The number of cases at our clinic in which this condition exists, represents the extent to which it prevails. You will meet with it constantly in your practice. Itself an effect of various causes, it occasions, in its turn, a host of morbid sequences, and it is found in incidental and accidental association with numerous diseases. You cannot disregard or depreciate it without failing to manage successfully a large proportion of the cases which you will be called upon to treat; more than this, without often doing harm instead of good, by means of therapeutical agencies.

Let us now inquire what are the phenomena which we may expect to find associated with anæmia, aside from the appearances already alluded to? I must not stop to do much more than to enumerate the more important of them, in order to leave time for devoting some consideration to other branches of the subject. A large number of phenomena are dependent on an abnormal excitation of the nervous system. The healthy action of this system requires that the red corpuscles of the blood shall not fall much below the limit of health; and when greatly diminished, the effect is not as we might *a priori* anticipate, mere inaction or incapacity for action, but a morbid activity or aberration. Neuralgia in various situations is apt to occur; in females that particular form known as the "pain in the side," is exceedingly common. This pain is situated at the lower part of the chest in front on either side, but oftener the left than the right. Cephalalgia is quite common. Hyperæsthesia of certain portions of the skin is frequent. When this is limited to the abdomen, and is marked, it simulates the tenderness of peritonitis, and may lead, without due knowledge and care, to an important error in diagnosis. Tenderness by the side of the spinous processes of the vertebrae is generally present, constituting what has been known as spinal irritation. In the majority of cases so called, anæmia exists, and the tenderness is more effectually relieved by measures addressed to the anæmic condition than by the severe local applications which were formerly in vogue. Palpitation is generally more or less prominent. Of the many patients, especially among females, who come to us with functional disorder of the heart, the majority are anæmic. The heart is usually irritable in the anæmic state; slight causes render the pulse frequent, so that it is important to bear in mind the injunction of Marshall Hall, not to judge of the habitual frequency of the pulse by a single examination made when we first begin to interrogate a patient, but to wait until the venous system has become tranquil, when it will often be found that, so far from the pulse being accelerated, it may be unnaturally slow. If a patient be subject to hysteria, the anæmic state predisposes to the various disorders embraced under that term.

Depression of spirits is a common effect of anæmia. Patients are disposed to look on the dark side of things; they lose the buoyancy which they have in health; they are easily affected and agitated. This effect may be greater

or less, in some instances amounting to melancholia. The mental depression frequently takes the direction of anxiety and apprehension on the subject of health. It is not unusual for patients to feel that they are to die soon. They imagine that they are affected with some fatal disease, which is generally either organic disease of the heart or consumption, these being popularly known as serious affections. If organic disease of the heart be imagined, sudden death is apprehended, it being a popular notion that cardiac affections usually destroy suddenly. A sense of inability for physical or mental exertion is another effect referable to the nervous system. There is not so much actual incapacity as there is a feeling of it. The powers of body and mind may be in reality somewhat weakened, but it is the indisposition or rather inaptitude to make any exertions of which the patient most complains, and this to persons of naturally active habits is a source of distress. This sense of inability to exertion is variable; it is felt on some days more than on others, and at certain periods of the same day more than at other periods. It is often to be felt during the process of digestion.

Various phenomena are dependent on the weakness of different organs. Exclusive of the nervous system, which we have just seen to be the seat of a morbid activity, the functions are enfeebled. Digestion is labored, or difficult, and perhaps imperfectly performed. In young girls there is sometimes a craving for unnatural articles, such as slate, chalk, etc. Whether the dirt-eating propensity, peculiar to the Southern negro, be generally associated with anæmia, I am unable to say. I may remark here that in the negro we cannot, for obvious reasons, appreciate all the physiognomic characters of anæmia; but those pertaining to the eye, the prolabia, and the mucous membrane, are perhaps the more conspicuous for being placed in relief by the blackness of the skin. The bowels are sluggish. Amenorrhœa and a scanty menstrual flow are occasional effects, as in the case to which I have called your attention to-day. The sexual propensity is lessened. Coldness of the extremities is almost invariably present, denoting deficient power of the circulation, or deficiency in those molecular changes which are attended by the production of animal heat.

I might extend this enumeration by including various incidental phenomena. I will mention one which will occasionally present itself, viz. a sense of numbness, sometimes limited to one extremity and sometimes extending over a lateral half of the body. This excites a good deal of alarm, lest it be a precursor of paralysis. That it is not, we may assure our patients positively. I have, however, known facial paralysis to occur in two instances, in which no cause could be assigned, exclusive of anæmia. In both these instances the paralysis was temporary.

With regard to these varied phenomena to which the condition of anæmia stands in a causative relation, more or less complete, there is this distinctive fact:—Several of them are associated in the same case. It is the grouping together of them which renders them symptomatic of the anæmic condition, rather than their significance individually. The present and previous history of a case of anæmia of some standing, generally embrace the greater part of the phenomena which I have enumerated. This fact has been abundantly illustrated in the cases which have presented themselves at our clinic. When we have satisfied ourselves that the patient is anæmic, and has been so for some time, we can foretell what our examination will disclose; neuralgic pains somewhere, palpitation, cold extremities, mental depression, a sense of incapacity for exertion; may be confidently anticipated. We may venture to inform the patient that these are the symptoms, although this method of inspiring confidence is liable to abuse, and borders on quackery.

There are certain physical signs distinctive of anæmia, which pertain to the circulation. These are the inorganic murmurs. Whether a strictly cardiac murmur may be due alone to an abnormal condition of the blood, is a question *sub judice*. By the expression, "strictly cardiac murmur," I

mean a murmur produced either within the cavities of the heart or at the auriculo-ventricular orifices. In the case given at the outset of this lecture, there exists a murmur referable by the rules of localization to the mitral orifice. There is no other evidence of organic disease in this case, and the question arises, may a mitral systolic murmur be inorganic? Generally it is not so; in other words, it denotes organic lesions of some kind; but I am not prepared to say that it may not be functional. I have known a mitral systolic murmur in a case of chorea associated with anæmia, without rheumatism, to continue for a time, and disappear when the patient recovered from the chorea and the anæmia. But if this murmur be ever inorganic, it is certainly very rarely so. We do not look for it in cases of anæmia, but we often find murmurs in the arteries near the heart, and at a distance from it. We hear them just above the heart, over the outer and pulmonic artery. They are, of course, always systolic, i.e. accompanying the first sound or systole. How do you know them to be inorganic murmurs? This is an important practical question, for if the murmurs are not inorganic, they denote organic lesions of some kind; and the existence of anæmia is not alone sufficient proof that the murmurs are inorganic, inasmuch as anæmia may be, and often is, associated with organic disease of the heart. We can generally arrive at the conclusion that they are inorganic, by directing attention to certain points in connection with the existence of anæmia. An inorganic murmur may be seated in the pulmonic artery. So far as my experience goes, it is oftener seated in the pulmonic artery than in the aorta. How to determine whether it be seated in the pulmonic artery or the aorta, I need not stop here to consider, for this is a point which we have already sufficiently considered in previous lectures. Now, if a murmur be seated in the pulmonic artery, in an anæmic person, the probability is that it is inorganic, because, exclusive of congenital malformations, this artery is very rarely the seat of organic lesions. The co-existence of a pulmonic and an arterial murmur is also evidence of both being inorganic. How do we know that we have these two murmurs co-existing? This is a question which I believe I have not before answered, and it is one which I have not considered fully in my work on the Diseases of the Heart. We can usually settle this nice point in auscultation, by comparing the murmur as heard over the outer and near the pulmonic artery. If a murmur heard in the second intercostal spaces, high to the sternum on both sides, have the same quality and pitch, the presumption is, that it is a single murmur transmitted into both situations; but if the murmur, as heard on the two sides, differs in quality and pitch, the presumption is, that it is not a single murmur, but that there are two murmurs, one of which is aortic, and the other pulmonic; and clinical observation shows a difference in quality and pitch on the two sides to be not unfrequent. Another point relates to the second sound of the heart. We can interrogate, after a little practice, without difficulty, the second sound as produced at the aortic and pulmonic orifices separately, and distinguish the one from the other. Now, organic lesions at the aortic orifice generally, although not invariably, involve the semilunar valves, so as to impair the aortic second sound. If, therefore, we find the aortic second sound and the pulmonic second sound preserving their normal relation to each other, as regards intensity and quality, the presumption is, that an aortic murmur in a well marked case of anæmia is inorganic. This presumption is strengthened by the absence of any enlargement of the heart, and because experience teaches us that aortic lesions generally lead sooner or later to cardiac enlargement.

Further evidence that murmurs at or near the arterial orifices are inorganic, is afforded by the coexistence of arterial murmurs in the subclavian and carotid arteries. Murmurs are often produced in these situations in anæmia, when they are not discovered near the heart. Here I wish to advert to a point, concerning which, until lately, I have entertained an erroneous opinion. I refer to the quality of

inorganic arterial murmurs. In my work on the diseases of the heart, I have stated that roughness is a distinctive characteristic of these murmurs. This is, I believe, the opinion generally held by experienced auscultators. An able reviewer in the *Dublin Quarterly Review*, however, has criticised my statement with regard to this point as too unqualified. Curiously enough, just before reading this review, I had been led to the same conclusion by a case which came under my observation since the commencement of the present session. You will recollect the case I visited in consultation, the patient of a medical friend, in part with reference to the question whether there existed aneurism of the aorta or subclavian artery. Under the right clavicle there was a loud and distinctly rough murmur, which, naturally enough, suggested the idea of aneurism. No other signs of aneurism, however, existed. The patient was intensely anæmic, and death occurred a few days after my examination. I attended at the autopsy and brought away the heart, which I exhibited to the class, and made some remarks on the subject at that time. Both the heart and the arteries were entirely free from organic disease.

Another nice point in auscultation here suggests itself, to which I have not referred in my work on diseases of the heart, and which was just suggested to my mind by a question made to me by a member of one of my private classes in auscultation last winter. Suppose that we find an aortic murmur at the base of the heart, and a murmur in the carotid artery, the latter may be either transmitted from the aorta, or it may be produced within the carotid; can we determine which of these explanations is correct? We can generally do so by comparing the murmurs in the neck, and at the base of the heart, as respects pitch and quality of sound. A transmitted murmur preserves its pitch and quality, certainly as a rule. If, therefore, the murmur in the neck be the same murmur heard at the base of the heart, save only as regards intensity, it is transmitted; but if it differ in pitch or in quality in the situations, there are two murmurs, one produced in the aorta, and the other in the carotid.

We have not yet done with the murmurs incident to anæmia. What is called the venous hum, when present, is highly characteristic. This murmur is the continuous humming sound, sometimes musical, which the French writers call *bruit de diable*. This is truly a formidable title for an auscultatory sound; reference, however, is had, not to his satanic majesty, but to the spinning-top. The murmur often closely resembles that produced by this toy, which in France is known as *le diable*. This murmur is produced within the veins of the neck, oftener on the right side than on the left side, the patient either sitting or standing. That it is a venous murmur is demonstrated by compressing the veins above the stethoscope. The murmur is at once arrested, and it may be made to come and go at pleasure. This fact I have demonstrated to all of you in cases which have presented at our clinic. I believe this to be always a sign of anæmia, but it is a sign present only in certain cases of anæmia, and, therefore, while it denotes this condition when it is present, its absence is by no means proof that anæmia does not exist. Why it should be present in some cases and not in other cases, I confess my inability to explain. The same remark holds good with respect to inorganic arterial murmurs; that is, they are present in only a certain proportion of cases of anæmia. They depend, doubtless, on an abnormal condition of the blood, but what the particular change is, I am not prepared to say.

The causes of anæmia, in a practical point of view, constitute a very important branch of the subject. We meet with this condition vastly oftener in the female than in the male, which is to be explained in a great measure by the fact that many of the causes are peculiar to the female sex, and in part, perhaps, by the fact that the relative proportions of the red corpuscles of the blood are normally somewhat less in the female than in the male. Loss of blood is a frequent cause. Women are exposed peculiarly to this

cause in consequence of the floodings in labor and the profuse menstrual flowings to which they are subject. Formerly, when the anæmic condition was not understood, and bleeding as a remedy was practised much more indiscriminately than at the present time, anæmia was often produced by injudicious venesections, aided, too, as these were, by the equally injudicious use of emetics and cathartics, conjoined with low diet. We cannot forbear the conviction that much harm was done in this way, and also by failing to recognise, as contra-indicating measures of depletion, a state of anæmia already existing. It is no reproach to the past to be obliged to entertain such a conviction. Physicians can be expected to see their way in practice only so far as the light of existing knowledge extends, and if there be not liabilities to error, there can, of course, be no room for improvement.

As a general remark, any excessive expenditure of the nutritive materials in the blood, exclusive of nutrition, may occasion anæmia. Thus, large or long continued purulent discharges give rise to it. In females a common cause is the profuse leucorrhœa from which many suffer for a great length of time without medical aid. Frequent child-bearing and lactation are perhaps the most frequent of all the causes. The great frequency of these causes you have been led to observe in the cases at our clinic. Over and over we have found on questioning nursing patients, who come here with the varied ailments belonging to anæmia, that they have been either pregnant or suckling children with little or no interruption for eight, ten, or twelve consecutive years. And to these causes are conjoined generally hard work, inadequate diet, and often exposure to various other hardships.

In other patients it is induced by deficient assimilation. This is the source often in females who are confined within doors by some sedentary employment. You will have observed that in several of our cases the patients have been seamstresses. Sitting day after day, without exercise of the muscles, or of the faculties of the mind, and removed from all excitement which stirs up the functions, there is but a small demand for supplies for nutrition. The digestive and assimilatory functions languish from inactivity; the desire for food at length diminishes or disappears, and the blood becomes impoverished. In other cases, among a different class of patients, assimilation is defective in consequence of an injudicious alimentation. This arises sometimes from depraved dietetic habits into which persons, especially females, fall unintentionally; but it is sometimes the result of a sickly sentimentality which imagines that it is more interesting and refined to ignore the substantial wholesome articles of food which God intended should be eaten and enjoyed. Other evils of anæmia here spring from the miserable fanaticism which stigmatizes good living as an offence against delicacy, morality, and religion. The prevalence of consumption is one of these evils; and were we to go beyond the *physique* to trace its consequences, we should be led to attribute not a small share of mental vagaries to this source, on the often quoted but often disregarded truism of the *mens sana in corpore sano*. Gluttony is not to be advocated, but in a physical, if not a mental, point of view, it is preferable to an equal extreme of asceticism. Not only the healthiest of men and women, but they who have attained to the highest perfection in intellect, morals, and piety, have been good eaters.

Occasionally we meet in practice with cases of anæmia in girls, occurring at or near the period of puberty, without our being able to attribute it to any obvious cause. It seems to be in some way connected with the evolution of the sexual system. It is to these cases especially that the term chlorosis has been applied. A greenish tint of the complexion is certainly not a reliable test, and it would be better were the term chlorosis discarded; but, if retained, it is well to restrict it to cases of the description now referred to.

In districts known as malarious, and among persons who have experienced frequent relapses of intermittent fever,

anæmia is quite common. The malarious poison may induce anæmia without giving rise to intermittent fever, but persons who have repeated attacks of the latter disease, or in whom the course of the disease is not interrupted, generally become anæmic.

We may add to this brief account of the causation, the occurrence of anæmia in connexion with an abnormal increase of the white corpuscles of the blood, to which the attention of pathologists has been called by Virchow and Bennett, termed by the latter leucocythemia. I have not time now to enter into a consideration of this pathological condition, and to do so would be a digression from our present subject.

I have considered anæmia, Gentlemen, in these remarks, as a condition which, with our present knowledge, presents itself to us in practice when it is to be regarded and treated as the point of departure for a great variety of consecutive ailments. The state of anæmia often occurs when the point of departure is obviously in some other affection to which the anæmia is incidental. Thus, in cases of tuberculosis, carcinoma, and Bright's disease, anæmia occurs as a prominent feature, but as occurring in these connexions, it is a subordinate condition; it belongs to the history of these diseases, and claims attention only as one of their elements. Anæmia, however, may concur with almost any disease with which it sustains no special relations. In other words, a person already more or less anæmic, is liable, as well as other persons, to be attacked with fevers, inflammations, and other affections; and on the other hand, persons affected with chronic maladies are liable, like other persons, to become anæmic from causes having no particular relation to the existing maladies. The point at which I wish to arrive is this: Wherever anæmia concurs with any disease of which it is not an intrinsic element, it modifies the phenomena of that disease, and must influence our treatment. Suppose, for example, that an anæmic person be attacked with a pneumonia, the anæmic condition is to be taken into account in estimating the significance of symptoms, especially those relating to the circulation and the powers of the system, and it is of vast importance to take cognizance of the concurrence of this condition in determining whether bloodletting or other measures of depletion shall be resorted to or not. This is an important practical point of general application. Inattention to this point in organic affections of the heart, has led to serious errors in practice. We have seen that one of the most constant and prominent of the effects of anæmia is irritability of the heart. This irritability, conjoined with obstructive or regurgitant lesions, increases greatly the disturbance due to the latter. It augments notably the intensity of the organic murmurs proceeding from these lesions. The practical error is in imputing all the disturbance to the lesions, and under the influence of this error perhaps adopting measures of treatment which aggravate the disturbance by increasing the anæmia. So far as diseases of the heart are concerned, the importance of recognising the co-existence of anæmia cannot be too forcibly impressed; but the same principle holds good, although not to an equal extent, in almost all affections. The practical injunction is to look for anæmia, not only when it is the chief, and so far as appears to us, the primary morbid condition, and not only as it occurs in certain affections to the history of which it belongs, but as it may accidentally be found associated with any disease.

Before proceeding to speak of the treatment of anæmia, I wish to call your attention to a form in which this condition is occasionally met with, differing from the ordinary forms in this important respect—it proceeds steadily and surely to a fatal issue. I refer to the form which Addison distinguishes as "idiopathic anæmia." He so distinguishes it because the anæmia is developed and continues without any adequate cause or causes being apparent. It is in these cases of idiopathic anæmia that Addison was led to observe disease of the supra-renal capsules. The bronzed hue of the skin occurs in a certain proportion of these cases only.

It is with the idiopathic fatal anæmia, not the coloration of the skin only, that Addison supposes the disease of the supra-renal capsules is connected. As there is, I believe, generally an incorrect impression on this point, I beg leave to read the following quotations from Addison's paper: "For a long period I have from time to time met with a very remarkable form of general anæmia, occurring without any discoverable cause whatever; cases in which there had been no previous loss of blood, no exhausting diarrhoea, no chlorosis, no purpura, no renal affection, splenic miasmata, glandular, strumous, or malignant disease" * * * * "It was whilst seeking in vain to throw some additional light on this form of anæmia that I stumbled on the curious facts which it is my more immediate object now to make known to the profession."

I do not propose to discuss in this connexion the question as to the existence of a pathological relation between disease of the supra-renal capsules and fatal anæmia with or without bronzing of the skin. I will simply say that I suppose it to be shown that if there be a relation it is only occasional, not constant. I had myself a patient last winter who died with slow fatal anæmia, complicated with almost universal and strongly marked bronzing of the surface, and after death there was found to be no appreciable degeneration of structure in the supra-renal capsules. The history of this case was so strikingly illustrative of the so-called Addison's disease, that I fully expected to find disease of the capsules, and the autopsy was publicly made in the Amphitheatre of the New Orleans School of Medicine. But, not to be diverted from the point to which I wish to direct your attention, cases such as Addison refers to in the quotations just read, must have fallen under the observation of most clinical observers. I met with two or three in my hospital wards in New Orleans during the winter of 1858-9, and again during the last winter. The patients entered with intense anæmia, and greatly prostrated. Interrogation of the important organs of the body showed no serious disease. Loss of appetite was a prominent symptom, and progressively this loss became total. Diarrhoea was more or less prominent before death, but this was not due to intestinal lesions, as shown by examinations after death. The patients died by slow asthenia, or inanition. No disease adequate to produce death was discovered by post mortem examinations. Notwithstanding Addison's researches, these cases must be considered not less inexplicable now than when he stumbled on lesions in the supra-renal capsules. Even were these constant, they would hardly shed much light on the occurrence of fatal anæmia. I have not the presumption to offer an explanation of these cases, but I have an idea which I do not hesitate to throw out, because I can do no more, and I give it only for what it may be worth. To follow it out by researches which will show it to be valuable or worthless, will probably not be within my power. I suspect that in these cases there exists degenerative disease of the glandular tubuli of the stomach. I am led to this suspicion somewhat as a physician is said once to have arrived at the conclusion that the pancreas must be diseased, by convincing himself that all the other organs in the body were sound, and this was the only organ that he could not satisfactorily interrogate! Here is, at all events, a field of research which has yet been hardly more than explored. Dr. Handfield Jones is the only one within my knowledge who has made degenerative disease of the gastric tubuli the subject of any investigation. He published some years ago the results of the examinations, by means of the microscope, of one hundred stomachs. In seventy-seven of this number there was found more or less atrophy of the tubuli. In fourteen cases the degeneration was considerable. We can as readily understand that these important organs should undergo degenerative disease not rendered distinctly apparent to the naked eye, as that this should be true of the

convoluted tubes of the kidney. It is perhaps the lot of some one to bring the microscope to bear upon investigations here with as much effect as Dr. George Johnson has done with respect to the renal organs. Of the importance of the stomach glands we can form an estimate when we consider that their business is to furnish from fifteen to thirty lbs. of gastric juice during the twenty-four hours. Nor is it difficult to see how fatal anæmia must follow an amount of degenerative disease reducing the amount of gastric juice so far that the assimilation of food is rendered wholly inadequate to the wants of the body. I shall be ready to claim the merit of this idea when the difficult and laborious researches of some one have shown it to be correct.

I come finally to say a few words on the treatment of anæmia. Exclusive of the form last referred to, and as it is ordinarily presented to us in practice, it is a condition amenable to appropriate treatment. The first thing is to seek to discover, and, if possible, to remove or obviate the causes. On the importance of this I need not dwell, nor is it necessary to recall the various sources to which the causes are to be traced, and the means by which their farther operation is to be prevented. The successful treatment will depend on the success with which these objects are accomplished. We are next to direct measures which are designed to remove the anæmic condition; in other words, restore to the blood the normal proportion of red corpuscles. Of remedies iron holds the first place. And of the numerous medicinal preparations of this metal, it is not easy to say which is the best suited to the majority of cases. The metal itself, reduced to an impalpable powder by hydrogen, is a good preparation, leaving the salts to be formed within the stomach. The citrate of iron in solution is an excellent form. The tartrate of iron and potash has the advantage of not being repulsive, and may be conveniently given in wine. The pyro-phosphate which has been lately introduced, has also the recommendation of not being disagreeable to the taste, and I have been led to think that the phosphorus in this combination is a valuable remedial agent in anæmia. You have doubtless noticed that I have prescribed this preparation frequently in the cases of anæmia presenting at our clinic. Whatever form may be at first selected, it is useful after a time to substitute another form, and, if the affection persist, successively different preparations. The advantage of this relates in part to the action of the remedy, and partly to the moral effect of the changes. I shall not discuss the question how iron operates in the cure of anæmia, but leave this question to my able colleague, the professor of materia medica who is much more competent to answer it than I am.

Another useful remedy is the chlorate of potassa. I have prescribed this remedy often in cases of anæmia for several years past, and I think that I cannot be mistaken in attributing to it in certain cases considerable potency. From one to three or four drachms may be given daily.

The vegetable tonics doubtless are useful, yet I confess that of late years I have used them but little, excepting the sulphate of quinia, which I imagine is more efficient than any or all of the bitter infusions and decoctions. When anæmia occurs in malarious districts, or in connexion with intermittent fever, the quinia is especially indicated, and under these circumstances the citrate of iron and quinia is an excellent remedy.

Important as remedies are, they would be alone inadequate to the cure of anæmia. With them must be conjoined an appropriate diet, and regimen. The diet should consist of digestive, nutritious food, sufficiently varied, properly cooked, and not deficient in quantity. This general statement must suffice without going into details which are of great importance, and which would require an entire lecture. The object is to introduce into the system alimentary supplies as rapidly and abundantly as the digestive powers will permit. Here is one great difficulty in treating many of the patients who come to dispensaries and clinics. Mere charities furnish medical advice

* These quotations are made from a paper by Dr. Wilkins, Guy's Hospital Reports, 2nd series, Vol. v. 1860.

and medicines, but often what is most needed is enough of wholesome, well cooked food. The anæmic diet should embrace a large proportion of tender meat.

The regimen should be adapted to increase the activity of digestion and nutrition. Out-door exercise is indispensable for this object. Without overtasking the muscles or the power of endurance of the system, the more the patient lives out of doors, as a rule, the better. Here are often difficulties in the way of treatment, arising from the necessity of in-door occupation, and the want of inducement to be abroad. Exercise should, as far as possible, be made interesting, by being conjoined with agreeable amusement.

Wine, spirits, or malt liquors, for a time are undoubtedly beneficial, when they are taken without excitement of the circulation or nervous system, and are accompanied by a sense of comfort. We must not shut our eyes to their value here, or in other forms of disease, while we are ever to be on our guard, so as not to sanction or promote their unnecessary or intemperate use.

We can often do much by encouraging anæmic patients, and assuring them positively that they are not in immediate danger of dying from disease of the heart, or some other fatal disease. But, Gentlemen, in order to be able to give these assurances you must be qualified to interrogate the important organs of the body, and to satisfy yourselves of the absence of disease. If you are able to say to patients that there is no disease of heart, in a manner to make yourselves believed, you will often do them a greater service than by the most efficient prescription. A constant state of mental anxiety and apprehension is a powerful obstacle in the way of recovery.

In conclusion, the treatment of anæmia is important, not only when, so far as our investigation can go, it is the root of the various ailments which exist, but when it is accidentally associated with other affections. As indicating certain measures, and as contra-indicating other measures, it must never be lost sight of if you would practise innocuously, judiciously, and successfully.

"THEY MANAGE THINGS BETTER IN FRANCE."—The dryness and want of animation which usually illustrate debates in our own English Medical Societies, have been often cast in their teeth; it is well, therefore, to hear what a French critic thinks of some of those brilliant outbursts of eloquence which we are often inclined to envy in listening to the prosaic humdrum way of doing business in which John Bull usually indulges. "They manage these things better in France!" Let us see. Here are the general remarks, made *à-propos* of the particular occasion on which M. Trousseau indulged the French Academy with an hour's burst of eloquence:

"And this leads us to a remark of more general application. Oratorical struggles in an Academy of Medicine have rather a *beautiful* than a *good* effect. They give animation, piquancy, and *popularity* to the meeting. But people come to them to hear an orator, not for instruction. Those long brilliant discourses, which refer more *ad hominem* than *ad rem*, or which have no direct reference either to the matter or the person, are like so many beautiful solos executed on different airs. They frighten away from the discussion many a modest but steadfast man, who would speak his mind freely in private society or in his seat, but who has not the courage to mount up to a tribune still vibrating with the echoes of an eloquent peroration. We merely signalize the fact without deducing any consequence from it. There is no other way of curing the evil than by limiting the length of the discourses, but whenever this has been tried it has been given up. Generally speaking, the orators whose voices the Society thus wished to stifle, have complained so loudly that in the end it was necessary to let them have their full swing."—*Medical Times and Gazette*.

Reports of Hospitals.

BELLEVUE HOSPITAL.

SURGICAL CASES—SERVICE OF DR. J. W. S. GOULEY.

[Reported by JOHN W. HUNT, M.D., House Surgeon.]

PERI-URETHRAL ABSCESS—OPERATION—RECOVERY.

JAMES McWATERS, *set.* 24, native of Ireland, laborer, of intemperate habits, was admitted to Bellevue Hospital, April 11, 1860, suffering from gleet, and a tumor in the perineum. Six years ago he was kicked by a man in the perineum, and according to his statement, the urethra was ruptured in consequence. He was treated at the New York Hospital, and, during the four weeks of the time he was in that institution, a catheter was worn. After his recovery, he was able to pass his water without much trouble, till three years ago, when he noticed that the stream was getting smaller. He had no serious difficulty, however, till six weeks ago, when he had an attack of gonorrhoea, of which his present gleet is the remains. Since then he has been able for the most part to pass his water only by drops. The tumor of the perineum commenced at about an inch from the verge of the anus, and extended forwards to the scrotum, quite hard to the feel, tender on pressure, somewhat inflamed, and obscurely fluctuating. The scrotum is somewhat oedematous. A catheter could be passed to the triangular ligament, but not farther without danger of laceration. His general condition is pretty good, appetite poor, and bowels confined; has had one or two slight chills. The diagnosis made was peri-urethral abscess, which probably communicated with the urethra. The bowels were relieved, and on April 12 an incision was made by Dr. Gouley into the tumor, directly in the median line. A large quantity of pus was discharged, which left the cavity extending to the urethra, but not communicating with it. The wound was dressed with warm water. A No. 4 silver catheter was introduced without much difficulty into the bladder, and allowed to remain there. April 13.—Patient comfortable, has slept well during the night, catheter removed and a poultice applied to the wound. On the following day he urinated without much difficulty, and from that time he continued to improve steadily until the 7th of May, when he was discharged.

STRANGULATED CONGENITAL HERNIA—OPERATION—EPILEPTIFORM CONVULSIONS—DEATH.

WILLIAM KYLE, single, *set.* 29, native of Ireland, intemperate, baker by occupation, was admitted to Bellevue Hospital, May 29, 1860, at 5 o'clock P.M. Since his earliest recollection patient had a tumor in the right groin, which, however, did not inconvenience him to any extent. While lifting, May 26, a barrel of flour, he felt something give way in his right groin, and soon after the right side of the scrotum became distended. The next day he had vomiting and considerable pain in the lower part of his abdomen, and in the right iliac region. From that time the vomiting continued at intervals, and he has been annoyed occasionally by hiccough. His bowels had not moved since the accident. He could walk without any apparent pain. On examining his abdomen he complained of slight tenderness over the whole of its lower part, more marked in the right iliac region. The tumor was rather more than an inch in diameter, followed the course of the spermatic cord to the external ring, was soft to the feel, dull on percussion, and received a slight impulse when patient coughed. A very slight amount of gurgling was felt and heard when an attempt was made at taxis. The testicle could be readily isolated. After making several ineffectual attempts to reduce this tumor, the attending surgeon, Dr. Gouley, was sent for. He saw the patient at 12 o'clock that night, and

decided the case to be one of congenital oblique inguinal hernia, which had become scrotal and strangulated. Dr. G. also made several unsuccessful attempts to reduce it, but failed. A large enema of soap-suds and castor oil was given, but it came away without producing any effect. Operation was then determined on, and at two o'clock A.M. it was performed. The patient was etherized. An incision about two and a half inches in length was made directly over the tumor, extending obliquely from about midway between the external and internal rings, to just below the brim of the pelvis. The tissues were carefully dissected down to the peritoneum, which was then nicked; a director passed in, and opened with a blunt pointed-bistoury. There was only a small amount of serum in the sac, a large amount of omentum and a loop of large intestine, which proved to be the transverse colon. About four inches in length of the gut were strangulated. It was a good deal injected, and there were a few patches of ecchymosis upon its surface. The omentum was also injected, but not in the least gangrenous. Looking downwards through the opening, the testicle could be seen in the scrotum, and by pressing from below could be brought up to it. An attempt was made to reduce the gut without enlarging the ring, but failed. It was then nicked with the hernia knife, cutting directly upwards; after which the strangulated mass was reduced without much difficulty. Scarcely half an ounce of blood was lost during the operation. The wound, carefully closed by suture and plaster, was covered by a graduated compress, and secured by a spica bandage. After the operation patient's pulse was 78, and full. He slept profoundly till five o'clock, and when he awoke he complained only of a slight uneasiness in his bowels. His pulse was then 80, and full; respiration normal. Morphine was administered, but failed in producing sleep, otherwise the patient seemed to be doing well; pulse 85, and respiration normal. At two o'clock I was called in haste to see him. I found him in an epileptiform convulsion, apparently comatose, face livid, pulse 110, respiration 8. The orderly stated that the patient suddenly became blue in the face, froth oozed from his mouth, and he began to snore. Dr. Gouley being engaged with an operation, Dr. Parker saw the patient with me, and advised brandy $\frac{1}{2}$ ss. and aque ammoniac gtt. x. In about ten minutes the patient became conscious, and answered a few questions. In about half an hour after the patient was seized with another attack, from which he did not recover. He died comatose, four o'clock the same afternoon. It was ascertained that the patient had had two similar epileptiform attacks, one five months and the other three weeks previous to admission.

Autopsy, 16 hours after death.—Rigor mortis well marked, the vessels of the brain were found largely injected. The ventricles contained a small amount of serum, in all other respects that organ appeared healthy. Liver and kidneys very slightly fatty. The peritoneum covering that part of the transverse colon which had been strangulated, was a good deal inflamed, the inflammation extending two or three inches beyond the points of strangulation on either side; the whole intestines were also covered by a film of lymph. No other lesions were apparent.

BROOKLYN CITY HOSPITAL.

SEVERE HEMICRANIA AND EPILEPTIC SEIZURES, RELIEVED BY HYPODERMIC INJECTIONS OF MORPHINE.

[Reported by H. W. BOON, M.D., House Physician.]

J. WILSON, set. 31, Irish, was admitted July 22, suffering from pain in the head; was healthy until sixteen months ago; temperate; married, and has two children; had chancre twelve years ago, but does not seem to have had any secondary symptoms. He is not a robust man, and states that during the last three years he has been obliged

to work about fourteen hours daily, and has had a great deal of anxiety. Sickness commenced sixteen months ago, with great pain over the right side of the head, mostly over the temple. Pain has continued ever since, much aggravated at times, when he described it as almost unbearable. During this time he has been subject to slight epileptic fits, of which he has had about twenty. Has been under treatment by a regular physician ever since September last. Usual means for the cure of neuralgia were tried without benefit. Bowels somewhat costive at present; pulse not very full; tongue clean, appetite good. Ord: cathart., and ung. veratrigæ to be rubbed on the forehead. Next morning, ord. quinia sulph. gr. v. three times daily. July 26.—No improvement up to present time. Stop quinia and ord. Fowler's sol. gtt. viij. three times daily; introduced seton in back of the neck. July 30.—Still complains of constant pain with exacerbations which interfere much with his sleep. Ord. morphine acet. gr. xvj., aque $\frac{1}{2}$ i. In evening gave hypodermic injection of ten drops of this solution on the temple. Patient slept better that night, and had less pain in head. Dose repeated in evening: Shows symptoms of influence of arsenic; stop Fowler's sol. Aug. 1st.—Did not sleep so well last night, but the pain is no worse. At night, gave gtt. xv. of same solution under skin. Slept six hours, and on awaking felt easier, he said, than for a year previously; gave gtt. x. as before. Aug. 7.—Has steadily improved, and has scarcely any pain. Aug. 9.—Has had no pain and sleeps well. Discontinue injections. Aug. 13.—No recurrence of pain. Discharged by request.

NURSERY AND CHILD'S HOSPITAL.

CYANOSIS WITH IMPERFECT FORMATION OF THE HEART—BRONCHO-PNEUMONIA, MALPOSITION OF THE COLON.

[Reported by J. LEWIS SMITH, M.D., Curator.]

THE child whose history is related below, had cyanosis from birth, due to imperfect formation of the heart. This organ, in fact, had but two cavities, and it was a matter of surprise to those who saw it that death did not occur sooner. The other point of chief interest in this case was the unusual relations of the transverse colon.

Sept. 3, 1860.—G. B., a male infant, about three months old, was admitted into the Hospital on the 24th of July last, under the care of Dr. Wm. W. Jones. At the time of admission he had a slight cough, but was well nourished, and did not appear seriously sick. The cyanotic hue was at all times present, and was much increased when he coughed or fretted. He at times cried as if from flatulence, for which clysters of *asafoetida*, among other things, were ordered. The nurse states that she often noticed fulness of the epigastric region, and the post-mortem examination showed how the intestinal gases were retained. About two weeks before death he was suddenly seized with fever, and the hurried and painful respiration of acute pulmonary disease. He was ordered various mild expectorant mixtures, and finally those of a more stimulating character, with small doses of brandy. Irritating embrocations and the oiled-silk jacket were employed locally. The disease, however, continued unabated, and he finally succumbed to it on the 3d of September.

Autopsy, twelve hours after death.—Body somewhat emaciated; cavities of the heart much distended with blood; the auricular septum entirely absent, with the exception of an oblique band, a line in diameter, passing across the middle of the open space; the ventricular septum also absent, the only partition between the ventricles being furnished by the muscular fibres attached to the valves; ductus arteriosus either absent, or its location anomalous; valves of the heart perfect, and the walls of the cavities, with the exceptions noticed, of the usual thickness and firmness. Mucous membrane of the bronchial tubes uniformly thickened and reddened, showing

the presence of severe bronchitis; the posterior portion of each lower lobe, dark red, non-crepitant, and solid to the feel; by strong insufflation, the air encroaches upon these portions, but their centres remain solid; by compressing the inflated lung with the hand, the air is forced into the solid vesicles, so that nearly all become crepitant. A curious anomaly is noticed in the position of the transverse colon; it passes under the duodenum, or upper part of the jejunum, and is considerably constricted at this point; the ascending colon, and the portion of the transverse lying between it and the constriction, much distended with gas, and bent upon themselves; that part of the colon between the constriction and the rectum contracted; mucous membrane of ascending colon, and first part of transverse, of healthy appearance, as is that of the stomach and small intestines; mucous membrane of descending colon, and of the portion of the transverse contiguous to it, thickened and vascular, but not ulcerated. Liver somewhat congested, and weighing six ounces; spleen and kidneys apparently healthy; mesenteric glands natural, with the exception, perhaps, of slight enlargement.

Microscopic Appearance.—The blood discs of usual appearance; very few colorless corpuscles observed; numerous exudation corpuscles in the diseased portion of the lungs, and a few noticed in the adjacent healthy lung tissue; the liver contains no more than the ordinary number of oil globules, free and in the hepatic cells, and they are quite small; a few small oil globules are observed in some of the tubuli uriniferi, but these ducts contain for the most part only the normal epithelial cells.

JOURNALS FOR SEPTEMBER.

NORTH AMERICAN MEDICO-CHIRURGICAL REVIEW.—Sept.

ART. I.—Dysentery: its Pathology, Causes, and Treatment, with Cases. By Dr. H. P. AYRES, Fort Wayne, Ind.—The disease is attributed to some atmospheric agencies acting upon a primitive diseased state of the blood. Dysentery, it is contended, is an inflammatory disease, and should be ranked with pleuritis, gastritis, and metritis, being either acute or subacute. In the epidemic of 1845, in Northern Indiana, it was inflammatory, and required antiphlogistics; in 1854 it was sub-acute, and astringents were useful, as a decoction of white oak bark; in 1856 it was subacute, with a morbid state of the liver and other organs, and required cathartics. Hence the necessity of a careful discrimination of the type of the disease before treatment is commenced. **ART. II. Tracheotomy in Croup;** by Dr. C. S. FENNER, of Memphis, Tenn.—Four cases are reported, all of which proved fatal; in a fifth case, not membranous croup, the patient recovered; the author concludes that it should be performed only as a last resort. **ART. III. A Case of Coup de Soleil;** by Dr. HUMPHREY PEAKE, Yazoo, Miss.—The autopsy showed the lungs intensely congested; heart healthy; brain not examined. The case is supposed by the author to sustain Dr. Dowler's opinion of the cause of death in this affection:—"Be it what it may, the cause of death begins, continues, and ends in the breathing apparatus." **ART. IV. Eclampsia in a Primipara at the sixth month of Gestation;** by Dr. R. B. S. HARRIS, Pensacola, Fla.—Convulsions occurring, craniotomy was performed, owing to the contraction of the antero-posterior pelvic diameter, and delivery effected; convulsions ceased; symptoms of metro-peritonitis ensued, which was treated principally with the following:—B. Potass. chlorat. ʒij, aque ʒ viij; tr. verat. virid. gtt. xx; patient recovered. **ART. V. Cases of Colloid Tumor of the Abdomen;** by Dr. S. D. GROSS, Prof. Surg. in Jeff. Med. Coll.—Three cases are referred to, in all of which the tumors occupied the entire abdominal cavity. **ART. VI. Treatment of Gleet by Compression;** by Dr. G. P. HACHENBURG, Springfield, O.—The

compression is effected by the introduction of an ivory, or highly-polished horn bougie, having a shoulder to prevent it from slipping into the urethra; it is maintained in position over night; five successful cases are reported. **ART. VII. Case of Universal Tuberculosis;** by Dr. J. P. KLUGE, Phys. to the Panama R.R.

AMERICAN MEDICAL MONTHLY AND NEW YORK REVIEW.—September.

ART. I.—Treatment of Phthisis by the Chlorate of Potassa, with Observations on Oxygen and Ozone as Therapeutic Agents; by Dr. E. J. FOUNTAIN, of Davenport, Iowa.—This paper, which was read before the American Medical Association at its last session, is based upon the theory that tubercular deposit is the result of an imperfect elimination from the system of the products of organic decay of the tissues of the body; that these deposits may be absorbed, and their further development arrested by increasing the supply of oxygen; and that the chlorate of potash, by easily parting with its oxygen, most readily fulfils this indication by rendering the blood arterialized without increasing the labor already performed by the lungs. Three cases are reported, each exhibiting the unmistakable symptoms of incipient phthisis. To each of these he gave half an ounce of chlorate of potash daily with entire success, which seems, in the author's opinion, to establish the following facts:—"1. The chlorate of potash may be given in large doses every day for a long time without injury. 2. It aids the functions of respiration by supplying the blood with oxygen. 3. It operates as a natural tonic, alterative, and blood depurant, by increasing the supply of that element which is the most active agent of nature in the chemical changes which take place in the laboratory of the human system." The late reports of ozonized oil being administered with benefit, he thinks are due to so much oxygen being administered with the oil. The paper concludes with some remarks upon ozone, which he calls "nascent oxygen." **ART. II. Physiology of the Circulation, a Course of Lectures, etc.,** by Dr. JOHN C. DALTON, JR.—We shall notice these lectures more at length when they are completed. **ART. III. Report of a Trial for Criminal Abortion;** by Dr. C. P. FROST, St. Johnsbury, Vt.—The sister of the victim of the abortionist testified to the operation with instruments; patient lived seven days; the autopsy revealed an enlarged uterus, the cervix in a sloughy state, a slough on the anterior wall not entirely detached, placental attachment well defined; vagina covered with pus; vulva swollen; other organs healthy; trial took place one year after the act, and resulted in the conviction of the prisoner. **ART. IV. Case of a Gunshot Wound; bullet found in the wall of right ventricle of the heart eighteen years after the accident;** by Dr. G. B. BALCH.

SOUTHERN MEDICAL AND SURGICAL JOURNAL.—September.

ART. XXI. The Humoral and Vital Pathology; by Dr. D. M. CLAY, of Irwinton, Ga. **ART. XXII. Union of Strands of Hair across the Incision in Wounds of the Scalp;** by Dr. F. M. PITTS, of Waco, Texas.—This treatment consists of uniting wounds with strands of hair instead of thread, the ends being fastened with perforated shot, compressed upon the hair. It was recommended by Professor Campbell, of Augusta, Ga. **ART. XXIII. Treatment of Deaf Mutes.** Translated from the French; by Dr. JOHN S. COLEMAN, of Augusta, Ga.—The remedy in this case was sulphuric ether dropped into the ear, which in some cases remarkably improved the hearing.

THE post mortem examination of the body of Prince Jerome led to the discovery of a ball which had remained in his chest after a duel which he fought in his youth with a brother of Marshal Davoust.

American Medical Times.

SATURDAY, SEPTEMBER 15, 1860.

PLANS FOR THE RELIEF OF THE INSANE.

In a previous article we endeavored to show the imperative necessity which exists for making some further provision for the care and proper maintenance of the insane, who are accumulating in large numbers in our Alms-houses and Poor-houses, without any adequate care or supervision on the part of the State or public authorities. We shall not at present stop to consider what must necessarily be the wretched condition of the insane in many of our Poor-houses. When we reflect that their keepers are without means or appliances for their proper care, without any knowledge of the subject of insanity, without the means of obtaining an adequate number of attendants, and without any proper supervision, we can readily conceive what must be their condition. Fortunately for the insane and for humanity, the old idea that insanity is a special infliction of Divine vengeance, or a mysterious dispensation of Providence, is exploded. Insanity is now justly regarded as a physical disease, often caused by physical agencies, and to be treated by physical as well as moral means; and that it is no more mysterious than any other disease of the physical organization. Or, more strictly speaking, insanity is a symptom of derangement in that delicate physical organization, by and through which mind is manifested, viz. the brain and nervous system.

In the Report of the Commissioners of Lunacy made to the Lord Chancellor of England in 1847, pages 229 and 230, we find the following just remark. After speaking of the importance of moral treatment they say:

"As a means of cure it ought never to be lost sight of. But there is reason to apprehend that the attention of medical men has been of late years too exclusively devoted to what is termed moral treatment, to the neglect in some instances of the resources of medicine. They appear occasionally to have lost sight of the fact that insanity never exists without a physical cause, namely some disturbance of the functions of the brain; disorders of the mind being only the result of some temporary or permanent derangement of the organism, by means of which all mental operations are carried on; whence it seems that physical agents ought to be resorted to in the first instance, or the means of restoring the healthy and natural state."

Speaking of the Reports made by the Medical Officers of the different asylums, the Commissioners say:—

"The conviction with which most of them seem to have been impressed is, that the disturbed state of the brain, which is the proximate cause of insanity in its various forms, is in most instances the result of disorders in some other part or function of the body, or of some serious derangement in the general state of health; and that the principal resources available for the cure of the cerebral affection consist of measures calculated to remove the original disorders of the physical or bodily function, and to restore the health of the constitution in general. Hence, the general recommendations of means to promote vigor of the body, such as exercise in the open air, ample diet, the careful administration of stimulants and tonics, bathing,

warm clothing, and healthful recreation. Experience, as we might collect from the replies which we have received, if no other means of information existed, would fully confirm the truth of this fundamental principle. It may indeed be observed that, in general, the number of recoveries from insanity is found to be in proportion to the degree in which the curative resources above alluded to, have been employed. Under the old system of keeping patients bound hand and foot in cells, often dark, loathsome, and disgusting, and feeding them with coarse and unwholesome food, the result was an accumulation of chronic cases, and a frightful aggravation of human misery. The present humane method of treating the insane, and the provision made at the public cost for Pauper Lunatic Asylums furnished with every resource for promoting health and comfort, exhibit in a striking point of view the intelligence of the age; and whilst they promise to diminish the numbers of the permanently insane, cannot fail to alleviate in a great degree the suffering of that most afflicted class of human beings."

It is now a well established fact that a large proportion of the insane may be restored to health by proper and judicious treatment in the early stage of the disease. The reports from the best conducted asylums give as high as seventy to eighty per cent., while the chance of recovery under the former mode of treatment is very slight indeed. The delicacy of the brain and nervous system involved, and the rapidity with which organic derangements are produced when neglected or improperly treated, point to the necessity of prompt and early attention to the first indication of disease. The inability of the patient to control himself, and the impossibility of proper control by family and friends; the absolute necessity of a change of the moral influence with which he is surrounded, in addition to the danger to himself or others when not restrained; all indicate the necessity of an early removal to a well conducted asylum. It is clearly not only the dictation of true economy, but equally of humanity, that *the State should establish a sufficient number of Asylums to receive and accommodate all recent cases of insanity*, and that no care or expense should be spared that can contribute to their recovery. With all the care and attention which we can bestow, there must necessarily be a large number of cases in which both moral and physical means prove in vain, and who remain incurably and permanently insane. This numerous class, which is rapidly increasing, is, equally with the other, entitled to our sympathy, and to the care and protection of the government; but unfortunately, neither public sympathy nor government can do much for them except to see that they are not abused, and that they are supplied with all that is necessary for their physical comfort. Nor do they require any great expenditures of money for costly buildings, and ornamented grounds, or medical and other attendance.

The question then recurs, what shall be done to relieve the present condition of the insane. It has been seen that our asylums are already crowded, while many are refused admittance, and many considered incurable are sent back to the alms-houses and poor-houses. Three different modes have been proposed:—

1. *To increase the number of asylums, where recent and curable, and the old and incurable cases, are mingled indiscriminately together.*
2. *To reserve the present, and if necessary additional asylums, as curative institutions, and erect new asylums, adapted only to the necessities and wants of the incurable.*

3. *Allow the State to provide a necessary number of Asylums, or Curative Institutions, leaving it for the separate counties to provide, under suitable supervision, and in proper places, for the maintenance and comfort of those who are decided to be hopelessly incurable.*

With regard to the first method of relief, it may be said that petitions have at different times been presented to the Legislature, and bills have been reported in favor of establishing new asylums similar to the one now in operation, but they have not resulted as yet in any legislation, apparently through fear of the expense. If, however, it should be deemed the best mode of providing for the insane, no degree of expense should deter the Legislature from performing a clearly imperative duty.

The objections are: 1. That it has been shown that a curative establishment is necessarily more expensive than one for the mere safe keeping and comfort of the patient. In our present institutions, the county is subject to the same expense for keeping an old, demented patient, who requires but little care, and whose recovery is hopeless, as for a recent case. The counties cheerfully pay for the keeping of a recent case, with a reasonable prospect of recovery, while they rebel at the prospect of a perpetual entailment of the tax. 2. The natural and necessary tendency of an institution where old and incurable patients are retained, is to become more and more filled with this class of patient; and the zeal, the interest, the care and attention of the medical and other officers decrease in proportion as the number of incurables increases. This is strikingly illustrated in the English Asylums, where incurable patients are never removed to enable them to receive recent cases. An American is always forcibly struck, on visiting British institutions, by the large number of old, incurable cases.

Should, then, new institutions be erected exclusively for incurable patients, reserving the present Asylums as Curative Institutions, the objections to this would—many of them, at least—be the same as the last. It would require the erection of new buildings on the part of the State. The expense of sending patients a distance from the counties where they belong would be the same, and the expense of supporting a patient in the Asylum could be but little less than at present. The incurable condition of the patient would destroy all ambition and energy on the part of officers and attendants; consequently their condition would soon be little or no better than that of the county Poor-houses. Besides the expense of transferring patients to and from an Asylum, and the remitting of funds, it is always better and more satisfactory to the counties to have the management of their own concerns, and the expenditure of the money in their own county or district.

If, then, the proper protection of the interest of the patients can be secured, and their care and comfort be insured without removing them from the county, and without any additional expense, it would certainly be desirable. But the consideration of this branch of the subject we shall defer to another occasion.

THE WEEK.

THE ASYLUM FOR INEBRIATES, with its walls only half completed, already presents the most noticeable and attractive architectural design of any public edifice in the State of New York. And the unequalled beauty and healthful-

ness of its location, the completeness and liberality of its plans, and the spirit in which the enterprise has been conceived and is now progressing, happily harmonize with the humane design and the peculiar requirements of this new work of faith in Humanity and Hygiene. Fortunately, the disputed theory and the alarming facts that have demanded the establishment of this institution, are to have ample facilities for demonstrating its philosophy and utility. Standing upon its walls at the morning's dawn, a few days ago, we were enabled to appreciate the reasons and feel the influences that decided the location of this great work at Binghamton; and for the first time, though the plans and progress of the edifice had been carefully noted, had we just idea of the extent and completeness of the plan of this institution. The work of construction is proceeding as rapidly as possible, but the main edifice cannot be completed this year; yet when completed, it will be altogether the most perfectly constructed, the best ventilated, the most economical and yet the most liberal in space, and the most healthfully and beautifully situated of any medical institution in the Empire State. And we delight to speak of this as a *Medical* institution. Its inception, design, and all its purposes have been conceived and matured in the mind of a physician, and the theory and success of its operations depend wholly upon physiological and medical facts which its philanthropic projector, Dr. J. Edward Turner, has devotedly studied these many years past, in our own and other lands. Though some persons may carp at the design, and good men may occasionally take exceptions to the work, on account of certain anticipations of its becoming "a premium to encourage the evil it would cure," the physician who understands the pathology of Oinomania, and is informed that nearly four thousand men and women—mainly from the better classes—are registered applicants for its benefits, must exclaim, as we involuntarily did, while standing upon its palatial walls, Grace unto it! Every member of the medical profession should do all in his power to promote the objects and perfect the design of this first Inebriate Asylum in the world; let them also encourage the establishment of similar institutions in other States: and if any one doubts the utility of special agencies of nature and art to invigorate and revivify the mind and all that is godlike in man, let him visit the grounds of the Asylum at Binghamton, and there unconsciously drink in the inspiration of the pure bracing atmosphere, the indescribable loveliness of the valleys, and the grandeur of the hills that make up the panorama of the surroundings of that institution, and then turn to the edifice which is to be a temple of health, and a home of refinement and moral culture, harmonizing with the faith, humanity, and taste that have designed and will complete the work.

THE MEDICAL COLLEGE OF OHIO, at Cincinnati, seems to have been suffering severely from internal dissensions, which must sadly interfere with its usefulness. The *Cincinnati Lancet and Observer*, for September, makes a full exposé of the matter. It seems from this statement that more than a year ago the faculty became dissatisfied with the conduct of the professor of surgery, Dr. Blackman, who did not give his customary lectures in the course, and passed a resolution expressive of their wishes that he should give his lectures in their regular course. At this the Professor of Surgery took offence, and the disagreement continued until he was requested by his colleagues to resign.

Prof. Blackman accordingly wrote his resignation, which was transmitted to the trustees, with a communication stating that the Faculty, "while they recognise the great skill and ability of Prof. Blackman, earnestly ask you to accept his resignation of the Chair of Surgery. The Faculty join in the belief that from certain infirmities of temper and judgment in Prof. Blackman it is impossible to maintain their professional connexion with him without ignoring much of their manhood, and putting in jeopardy the success of the College." The italics are given by the Faculty. Before the Board of Trustees took any action in the matter, Prof. Blackman withdrew his resignation; whereupon the Board, desirous that the Faculty should remain for the approaching session, reorganized the school, by appointing Prof. Blackman to the Chair of Clinical Surgery, his field of duty being the hospital. The Faculty, with two exceptions, refused to accept their re-appointments. In last July the old Board of Trustees was superseded by a new Board, which reorganized the school with its present Faculty. The statement from which we gather these facts, contains personal allusions unsuited to the pages of a medical periodical. We regret to have to record the distractions of that once eminent school of medical learning, founded in the early days of the Queen City of the West, and adorned by the talents of DRAKE, GROSS, CALDWELL, and HARRISON. There is no city that has such urgent need of an influential school, with a united and energetic faculty. We trust the present organization will prove more useful than is predicted, and that its new professors will prove themselves worthy successors of the earlier teachers in that school.

At the last meeting of the Sanitary Association, Dr. GRISCOM called attention to the case of Catharine Gordon, a young woman, aged seventeen, who died at the City Hospital on Wednesday evening of last week, from the effect of arsenic, administered by herself, on the Sunday evening previous. The poison was purchased by the girl at a drug store in West Broadway, the persons in attendance not asking any questions as to her name, residence, or purpose; and, what was worse, without any label on the package, in gross violation of the law. After the death of the girl, Dr. Griscom, who had treated her during her illness, inquired into the case, and endeavored to bring the culpability of this druggist to the notice of the authorities, but his intentions were frustrated by the hasty and inefficient manner in which the coroner disposed of the case. A *post-mortem* examination was refused, and no means taken to summon the proper witnesses to convict the druggist of violating the law, or even the facts, to reach public attention. The doctor stated that this druggist is a brother-in-law of a prominent city official—the head of one of the departments. He entertained no doubt that if the law had been complied with the unfortunate girl would be alive now. The Association appointed a special committee to inquire into these facts, and adopt such measures as they may deem expedient. The following gentlemen were appointed:—Dr. Percy, Dr. Roberts, and Dr. Batchelder.

We desire to call attention to the announcement of the Medical Board of Bellevue Hospital in regard to the examination of candidates for the position of assistant physicians. No changes have been made by the Commissioners in the manner of those appointments, and applications will be made according to the notice.

BRITISH SCIENTIFIC ASSOCIATION.

[At the recent meeting of this Association the following paper was read, an abstract of which we take from the LONDON ATHENÆUM.—Ed.]

ON THE INTELLECTUAL DEVELOPMENT OF EUROPE, CONSIDERED WITH REFERENCE TO THE VIEWS OF MR. DARWIN AND OTHERS, THAT THE PROGRESSION OF ORGANISM IS DETERMINED BY LAW. By Prof. DRAPER, M.D., of New York.

"The object of this paper was to show that the advancement of man in civilization does not occur accidentally or in a fortuitous manner, but is determined by immutable law. The author introduced his subject by recalling proofs of the dominion of law in the three great lines of the manifestation of life. First, in the successive stages of development of every individual, from the earliest rudiment to maturity; secondly, in the numberless organic forms now living contemporaneously with us, and constituting the animal series; thirdly, in the orderly appearance of that grand succession which in the slow lapse of geological time has emerged, constituting the life of the Earth, showing therefrom not only the evidences, but also proofs of the dominion of law over the world of life. In those three lines of life he established that the general principle is, to differentiate instinct from automatism, and then to differentiate intelligence from instinct. In man himself three distinct instrumental nervous mechanisms exist, and three distinct modes of life are perceptible,—the automatic, the instinctive, the intelligent. They occur in an epochal order, from infancy through childhood to the more perfect state. Such holding good for the individual, it was then affirmed that it is physiologically impossible to separate the individual from the race, and that what holds good for the one holds good for the other too; and hence that man is the archetype of society, and individual development the model of social progress, and that both are under the control of immutable law: that a parallel exists between individual and national life in this, that the production, life, and death of an organic particle in the person, answers to the production, life, and death of a person in the nation. Turning from these purely physiological considerations to historical proof, and selecting the only European nation which thus far has offered a complete and completed intellectual life, Prof. Draper showed, that the characteristics of Greek mental development answer perfectly to those of individual life, presenting philosophically five well-marked ages or periods,—the first being closed by the opening of Egypt to the Ionians; the second, including the Ionian, Pythagorean, and Eleatic philosophies, was ended by the criticisms of the Sophists; the third, embracing the Socratic and Platonic philosophies, was ended by the doubts of the Sceptics; the fourth, ushered in by the Macedonian expedition and adorned by the splendid achievements of the Alexandrian school, degenerated into Neoplatonism and imbecility in the fifth, to which the hand of Rome put an end. From the solutions of the four great problems of Greek philosophy, given in each of these five stages of its life, he showed that it is possible to determine the law of the variation of Greek opinion, and to establish its analogy with that of the variations of opinion in individual life. Next, passing to the consideration of Europe in the aggregate, Prof. Draper showed that it has already in part repeated these phases in its intellectual life. Its first period closes with the spread of the power of Republican Rome, the second with the foundation of Constantinople, the third with the Turkish invasion of Europe: we are living in the fourth. Detailed proofs of the correspondence of these periods to those of Greek life, and through them to those of individual life, are given in a work now printing on this subject, by the author, in America. Having established this conclusion, Prof. Draper next briefly alluded to many collateral problems or inquiries. He showed that the advances of men are due to

external and not to interior influences, and that in this respect a nation is like a seed, which can only develop when the conditions are favorable, and then only in a definite way; that the time for psychical change corresponds with that for physical, and that a nation cannot advance except its material condition be touched,—this having been the case throughout all Europe, as is manifested by the diminution of the blue-eyed races thereof; that all organisms and even man are dependent for their characteristics, continuance, and life, on the physical conditions under which they live; that the existing apparent invariability presented by the world of organization is the direct consequence of the physical equilibrium, but that if that should suffer modification, in an instant the fanciful doctrine of the immutability of species would be brought to its proper value. The organic world appears to be in repose because natural influences have reached an equilibrium. A marble may remain motionless for ever on a level table, but let the table be a little inclined, and the marble will quickly run off; and so it is with organisms in the world. From his work on Physiology, published in 1856, he gave his views in support of the doctrine of the transmutation of species; the transitional forms of the animal and also the human type; the production of new ethnical elements, or nations; and the laws of their origin, duration, and death.

"The announcement of this paper attracted an immense audience to the Section, which met this morning in the Library of the New Museum. The discussion was commenced by the Rev. Mr. Cresswell, who denied that any parallel could be drawn between the intellectual progress of man and the physical development of the lower animals. So far from the author being correct with regard to the history of Greece, its masterpieces in literature—the *Iliad* and *Odyssey*—were produced during its national infancy. The theory of intellectual development proposed was directly opposed to the known facts of the history of man.—Sir B. BRODIE stated, he could not subscribe to the hypothesis of Mr. Darwin. His primordial germ had not been demonstrated to have existed. Man had a power of self-consciousness—a principle differing from anything found in the material world, and he did not see how this could originate in lower organisms. This power of man was identical with the Divine Intelligence; and to suppose that this could originate with matter, involved the absurdity of supposing the source of Divine power dependent on the arrangement of matter.—The Bishop of Oxford stated that the Darwinian theory, when tried by the principles of inductive science, broke down. The facts brought forward did not warrant the theory. The permanence of specific forms was a fact confirmed by all observation. The remains of animals, plants, and man found in those earliest records of the human race—the Egyptian catacombs, all spoke of their identity with existing forms, and of the irresistible tendency of organized beings to assume an unalterable character. The line between man and the lower animals was distinct: there was no tendency on the part of the lower animals to become the self-conscious intelligent being, man; or in man to degenerate and lose the high characteristics of his mind and intelligence. All experiments had failed to show any tendency in one animal to assume the form of the other. In the great case of the pigeons quoted by Mr. Darwin, he admitted that no sooner were these animals set free than they returned to their primitive type. Everywhere sterility attended hybridism, as was seen in the closely-allied forms of the horse and the ass. Mr. Darwin's conclusions were an hypothesis, raised most unphilosophically to the dignity of a causal theory. He was glad to know that the greatest names in science were opposed to this theory, which he believed to be opposed to the interests of science and humanity.—Prof. HUXLEY defended Mr. Darwin's theory from the charge of its being merely an hypothesis. He said, it was an explanation of phenomena in Natural History, as the undulating theory was of the phenomena of light. No one objected to that theory, because an undulation of light had never been arrested and measured. Dar-

win's theory was an explanation of facts; and his book was full of new facts, all bearing on his theory. Without asserting that every part of the theory had been confirmed, he maintained that it was the best explanation of the origin of species which had yet been offered. With regard to the psychological distinction between man and animals; man himself was once a monad—a mere atom, and nobody could say at what moment in the history of his development he became consciously intelligent. The question was not so much one of a transmutation or transition of species, as of the production of forms which became permanent. Thus the short-legged sheep of America were not produced gradually, but originated in the birth of an original parent of the whole stock, which had been kept up by a rigid system of artificial selection.—Admiral FIRZROY regretted the publication of Mr. Darwin's book, and denied Prof. Huxley's statement, that it was a logical arrangement of facts.—Dr. BEALE pointed out some of the difficulties with which the Darwinian theory had to deal, more especially those vital tendencies of allied species which seemed independent of all external agents.—Mr. LUBBOCK expressed his willingness to accept the Darwinian hypothesis in the absence of any better. He would, however, express his conviction, that time was not an essential element to these changes. Time alone produced no change.—Dr. HOOKER being called upon by the President to state his views of the botanical aspect of the question, observed that the Bishop of Oxford having asserted that all men of science were hostile to Mr. Darwin's hypothesis—whereas he himself was favorable to it—he could not presume to address the audience as a scientific authority. As, however, he had been asked for his opinion, he would briefly give it. In the first place, his Lordship, in his eloquent address, had, as it appeared to him, completely misunderstood Mr. Darwin's hypothesis: his Lordship intimated that this maintained the doctrine of the transmutation of existing species one into another, and had confounded this with that of the successive development of species by variation and natural selection. The first of these doctrines was so wholly opposed to the facts, reasonings, and results of Mr. Darwin's work, that he could not conceive how any one who had read it could make such a mistake—the whole book, indeed, being a protest against that doctrine. Then, again, with regard to the general phenomena of species, he understood his Lordship to affirm that these did not present characters that should lead careful and philosophical naturalists to favor Mr. Darwin's views. To this assertion Dr. Hooker's experience of the Vegetable Kingdom was diametrically opposed. He considered that at least one-half of the known kinds of plants were disposable in groups, of which the species were connected by varying characters common to all in that group, and sensibly differing in some individuals only of each species; so much so that, if each group be likened to a cobweb, and one species be supposed to stand in the centre of that web, its varying characters might be compared to the radiating and concentric threads, when the other species would be represented by the points of union of these; in short, that the general characteristics of orders, genera, and species amongst plants differed in degrees only from those of varieties, and afforded the strongest countenance to Mr. Darwin's hypothesis. As regarded his own acceptance of Mr. Darwin's views, he expressly disavowed having adopted them as a creed. He knew no creeds in scientific matters. He had early begun the study of natural science under the idea that species were original creations; and it should be steadily kept in view that this was merely another hypothesis, which in the abstract was neither more nor less entitled to acceptance than Mr. Darwin's: neither was, in the present state of science, capable of demonstration, and each must be tested by its power of explaining the mutual dependence of the phenomena of life. For many years he had held to the old hypothesis, having no better established one to adopt, though the progress of botany had, in the interim, developed no new facts that favored it, but a host of most suggestive objections to it.

On the other hand, having fifteen years ago been privately made acquainted with Mr. Darwin's views, he had during that period applied these to botanical investigations of all kinds in the most distant parts of the globe, as well as to the study of some of the largest and most different Floras at home. Now, then, that Mr. Darwin had published it, he had no hesitation in publicly adopting his hypothesis, as that which offers by far the most probable explanation of all the phenomena presented by the classification, distribution, structure, and development of plants in a state of nature and under cultivation; and he should, therefore, continue to use his hypothesis as the best weapon for future research, holding himself ready to lay it down should a better be forthcoming, or should the now abandoned doctrine of original creations regain all it had lost in his experience."

Progress of Medical Science.

PRACTICAL MEDICINE.

Treatment of Scalds of the Glottis. By DR. J. SLOANE. According to Mr. Wright of Nottingham, who is a surgeon of great experience, tracheotomy in scalds of the glottis almost invariably results in death; and the treatment by leeching, calomel, and antimony, is frequently successful. In the *Medical Times and Gazette*, there was lately published a report of fourteen cases of scalds of the glottis in which tracheotomy was adopted. If we add to these fourteen the case which I have published, and another which occurred about two years ago in the Dispensary of this town, and which ended fatally, we have sixteen cases of scalds of the glottis in which tracheotomy was resorted to, and, of these, no fewer than thirteen ended fatally, and "in one of the cases which recovered, from certain peculiarities in the history, there is quite room for doubt as to whether the boiling water had ever reached the glottis." These facts are in accordance with Mr. Wright's statement, that tracheotomy in scalds of the glottis almost invariably ends in death, and, as far as my observation has extended, the other part of his statement is equally correct, in which he avers that the treatment by calomel, antimony, and leeching is frequently successful. In five of the six cases I publish it was successful, and, I believe, if tracheotomy had not been adopted in the remaining case, it would have been successful in this also. In scalds of the glottis, I believe it is the best course to commence treatment by calomel and antimony as soon as the accident has happened, although dyspnoea may not be present, and to continue the treatment for forty-eight hours, gradually diminishing the doses for the last twenty-four hours. By the early adoption of the treatment the dyspnoea may be prevented, or at least mitigated; at all events no harm is likely to ensue from this course.—*British Med. Jour.*

Stearate of Iron.—DR. CALVI states, in the *Union Médicale* for May 5th, that M. Ricord has successfully employed a plaster of stearate of iron as a dressing for phagedenic ulcers of the thighs in a syphilitic patient, which had resisted all previous treatment. A comparative trial was made with this preparation and coal-tar; and the former was found to be by far the most efficacious. Stearate of iron is made in the following way:—Take of sulphate of iron, one part; soap, two parts. Dissolve the sulphate of iron and the soap in water separately. On adding the solutions to each other, a greenish white precipitate is obtained; this is dried, and melted at a temperature of from 175° to 190°; essence of lavender (40 per cent.) is then added, and the whole is stirred until it cools. A plaster can be formed by gently melting it and spreading it on linen.—*British Jour.*

Hypodermic Injection of Morphia; by J. K. SPENDER, Esq.—A due discrimination of cases ought to be made for

this plan of treatment. To practise it in every example of neuralgia would be unwise and useless; for nerve-disorder often depends upon such trivial causes as an error of digestion or over-fatigue, and vanishes spontaneously when the exciting agent is removed. The cases in which success can most probably be hoped for are those in which the system has been long worn by pain, and in which a general spasmic condition exists. The administration of morphia in the hypodermic method appears then to act as a narcotic shock, which powerfully and almost instantaneously soothes the whole nervous system, and destroys the local hyperæsthesia. Sometimes this result is permanent, sometimes not, according to the permanent or temporary agency of the causes of the disorder. But however short the interval of ease, it ought to be very welcome; for I believe that the great hindrance to our successful treatment of neuralgia has been our obstinate theorising about its etiology. While we are busy in classifying our supposed *materies morbi* (no classical phrase ever exercised so complete a tyranny over us), and are applying our chemical and dynamical drugs accordingly, we are apt to forget the simple clinical fact that a human being lies in agony by our side, and supplicates relief for that one symptom—*pain*. Let us, if we can, first utterly overwhelm and abolish this pain; perhaps it will never return; but at all events, when our patient is in a grateful stupor, there will be time to philosophise about the origin of the malady which we are called upon to subdue.—*British Med. Jour.*

On the Influence of Belladonna on the Pneumogastric Nerve. By RICHARD HUGHES.—That belladonna has such an influence will farther appear from a consideration of its effects on disease. Hooping-cough and asthma are admittedly spasmodic affections, in which irritation of the pneumogastric nerve is at the bottom of the phenomena: and both of these affections are singularly under the control of belladonna and its congeners. Stramonium is the favorite remedy in asthma; and the use of belladonna in hooping-cough is becoming more and more general. In the former case, we have the evidence of direct experiment for our theory. Galvanisation of the pneumogastric has been found by Valentin to produce constriction of the trachea and bronchial tubes; while on the other hand, in animals poisoned by belladonna and stramonium, these tubes have been found lax, and have refused to contract under the strongest stimuli (Watson's *Lectures on Physic*, 4th ed., vol. ii., p. 358, 363). Lately, moreover, an enterprising French surgeon has attempted and (apparently) achieved the cure of asthma by injecting a solution of atropine upon the pneumogastric nerve in the neck (*Medical Times and Gazette*, Nov. 26, 1859). Another affection in which belladonna has been found very beneficial, and in which the pneumogastric is the seat of irritation, is obstinate spasmodic vomiting. A patient was suffering from cancer of the pylorus; the usual incessant vomiting took place. Belladonna was given, and it ceased. After death the stomach was found lax and enormously distended. Mr. Amesbury tells me he once had a case of obstinate vomiting in pregnancy. All the usual remedies failed; at length he tried belladonna, with complete success. Here again, as the pneumogastric is the motor nerve of the muscular coat of the stomach, a sedative influence exercised by the belladonna upon this nerve will explain the phenomena.—*British Journal.*

Treatment of Chronic Myelitis. By Dr. BROWN SEQUARD.—In the beginning of the treatment of chronic myelitis, we usually employ ergot of rye alone internally, and belladonna externally in a plaster applied to the spine, over the painful spot. The dose of ergot, when the powder is used, which is almost always the case, is at first two or three grains twice a day; gradually the dose is increased until it reaches five or six grains twice a day; and in a few cases we have given eight grains twice a day. We do not think it is necessary to make use of the very large doses employed by M. Payan. The belladonna plaster applied to the spine must be a very large one, four inches wide, and six or seven

inches long. If there is no amelioration in a few weeks, we give the extract of belladonna internally in doses of a quarter of a grain twice a day.—*Lancet*.

Functional Spasm.—M. Duchenne (de Boulogne), well known by his indefatigable researches on the subject of nervous disorders, has lately described, under the double name of *functional spasm and functional muscular paralysis*, an affection, which though often noticed in a vague way by most clinical observers, had never been seriously studied by pathologists. The conditions which are implied in the name of this disorder are not permanent, or at all events are not permanently prominent, requiring for their reproduction or manifestation the exercise of some special function, of which they then impede the progress. The commonest form of this affection is that called the "scrivener's cramp," and the seat of the spasm or paralysis is in one or more of the fingers, which either curl up, or may become so powerless as to cause the writer to drop his pen—this condition being often observable after a few strokes of this implement, and consequently wholly unconnected with fatigue or nervous sur-excitation. Other muscles besides those of the hand and arm are also found to be liable to this affection—e. g., the sterno-mastoids, the abdominal muscles, and also those of the shoulder. It is, according to M. Duchenne's observation and experience, generally incurable, and out of thirty-five cases treated by cutaneous Faradization, only two were benefited, and no amelioration whatever was noticed in the remaining thirty-three.—*Lancet*.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE. SECTION ON SURGERY.

DR. JAMES R. WOOD, President.

RESECTION OF JOINTS.

E. KRACKOWIZER, M.D., read a paper on Excision of Knee-joint.

He first considered the indications of this operation in arthrocase, drawing a distinction between the cases in which excision might be practised and those in which amputation ought to be performed. Too little is yet known of this operation in *recent injuries* of the joint to pass a final opinion. But when we consider that Strohmeier in the war between Denmark and Sleswig-Holstein, in gunshot-wounds of the knee, found the mortality without operation seventy-nine per cent., and with amputation sixty per cent., we should seem justified in giving a systematic trial to an operation, which if it succeeds not only saves a life but also a limb, whereas amputation, which to save a life sacrifices a limb, shows a mortality of sixteen per cent. In Paris, at the time of the street fights in 1848, the mortality was seventy-three per cent.

Excision of the Knee-joint has been made in four cases of secondary luxation of the tibia, after every trace of inflammation had passed away for a long time—Ried in Germany, Thomson and Pemberton in England, and Gurdon Buck in America. In these three cases it was perfectly successful. For *badly united fracture of the patella*, and consequent uselessness of limb, it was performed once by Dr. Humphrey with good result.

As the operation originated in England, so its revival in that country by Fergusson has induced many to give it a trial, and all the leading surgeons are in its favor, if we except Syme whose opposition to it has the character nearly of idiosyncrasy. Bryant gives it a very qualified approval, and the discussion in the *Medico-Chirurgical Society* of London, on P. M. Humphrey's paper, showed Holmes,

Coote, Skey, and Tamplin as rather decided opponents.

In France the operation has never attracted much attention, if we except Moreau sen. and jun.; and since Roux's case terminated fatally in 1816, it has been forgotten. A discussion in the *société de chirurgie*, November 3 and 10, 1857, revealed an entire ignorance of its merits on the part of such men as Robert, Larrey, Broca, Marjolin, and Maisonneuve. Follin and Giralles vindicated the operation on the strength of statistics of English authors.

In Germany the operation has been ignored by the majority of surgeons. Still it was the only country in which, after the great authority of Syme had stricken it from the list of operative proceedings in England, it was practised; the operators were Ried, Fricke, Textor, sen. and jun., Günther, Heyfelder, Roser, Knorre, Bruns, Heuffer, Demme, and Adelman. But it was the impulse given by the English surgeons, from the time Fergusson took it up again in 1850, that led the present generation of German surgeons to give it a fair trial, and B. Langenbeck, Ried, Eschmarch, Billroth, Streubel, and Schillbach, are its able advocates, while Gunther, Roser, and Pauli, have not yet retracted the sentence of condemnation which they pronounced a few years ago against this surgical heresy.

The objections which are urged by the adversaries of the operation are:—

1st. That it makes a very large wound. It has been proved by Fergusson against Syme, that the wound after the excision of the knee-joint, is actually smaller than after amputation of the thigh. Besides, no main arteries or nerves are wounded.

2d. That the duration of the healing process is tedious. In very many cases, the greater majority in fact, consolidation takes place after two months, and after all it is not so very rare that partial necrosis of the amputated femur, and long suppuration from burrowing of matter, take place, after amputation.

3d. *Uselessness of the Limb.*—There are indeed cases known, where only ligamentous union has taken place, or where the carious process in the resected bones continued, so as to oblige amputation. Amputation has been resorted to twenty-one times, but the ratio of mortality is not higher than if excision had previously never been made. As for ligamentous union only, a very short one does not impair the usefulness of the limb, and the unsteadiness from ligamentous union can be remedied by strong kneecaps (Pemberton). But putting aside this palliative, a radical cure may reasonably be expected by a repeated resection, in which case the danger from the second operation could not be greater than if we operate for imperfect union after a fracture.

4th. *Disparity of Growth in Young Subjects.*—This is a very weighty objection, and cases enough are known (Syme, Pemberton, Keith) to prove, what from anatomical and physiological theories might be expected, a very serious arrest of growth, if the operation had been performed in children. More observations, and more experiments on animals (such as were instituted by A. White, Vermandois, Wachter, Heine, and Wagner) are required to settle this point.

5th. *The Great Mortality.*—The greatest number of operations having been performed in England, we can compare the mortality in amputations of the thigh in England with the mortality of all (to me) known cases of excision of the knee-joint.

Of patients suffering amputation through the thigh for gonarthrocase 18.2 per cent. in Guy's Hospital; in University College Hospital 20.5 per cent. In the London hospitals during 1855, 1856, and 1857, 169 amputations were performed, with 38 deaths, or 22.5 per cent. (*Teale*.) During the same time in the British provincial hospitals 134 amputations gave 33 deaths, or 24.7 per cent. (*Teale*.)

The number of cases of excision of knee-joint which I have collected give the following result. The table closes

with 1858 for England, 1859 for Germany, and April, 1860, for America:—

England, 166 cases, 34 deaths, 19 subsequent amputations. France, 4 cases, 3 deaths.

Holland, 1 case, 1 death.

Germany, 49 cases, 21 deaths, 2 subsequent amputations.

United States of America, 13 cases, 4 deaths, 2 under treatment, with prospect of recovering a good limb.

Total—233 cases, 63 deaths, 21 subsequent amputations.

AMERICAN SURGEONS.

RESULT.

R. A. Kinloch, Charleston, S. C., good limb.

Gurdon Buck, New York, "

Joseph Pancoast, Philadelphia, "

Brainard, Chicago, "

J. M. Minor, Brooklyn, N. Y., "

Wm. H. Van Buren, New York, "

Willard Parker, " died.

James R. Wood, " good limb.

L. A. Voss, New York, under treatment, firm bony union, patient walks, necrotic bone to be touched through several sinuses.

E. Krackowizer, New York, died. Child two years of age.

E. Krackowizer, " pretty firm union after eight weeks, carious bone in the middle.

A. B. Mott, New York, died of pyæmia. Amputation.

L. A. Sayre, " died after two weeks of tubercular meningitis, local reparative process excellent.

Dr. Willard Parker has since had a successful case. It is said that Dr. Cooper, of San Francisco, California, has operated several times, of which I have no definite information.

The ratio of mortality in excision of knee-joint is therefore 27 in 100. If the subsequent amputations should be counted, the ratio of failures would be 36 in 100. But it is hardly fair to count those, because, as before mentioned, the mortality after amputation, where previous excision of knee-joint had been made, is not greater than where amputation for disease of the knee-joint is performed without any previous attempt to save the limb. There are six cases known where from ligamentous union the limb was greatly impaired, or next to nothing. As an offset for this imperfect result, we may count those cases on the side of amputation, where a badly formed stump, frequent ulceration of the cicatrix, and neuralgia, cause serious inconvenience, and even danger to life and health. It must also be noticed, that the foregoing table includes all known cases, from the infancy of the operation to its present high degree of perfection. It will be readily conceded, that in this respect it is now put on equal terms with amputation, whose technicism and after treatment has, it may be said, almost reached the top of perfection. But granted that statistics of mortality should always pronounce to a limited degree in favor of amputation, it must be maintained, that for the possibility to secure a natural limb, although stiff from the hip to the ankle-joint, the surgeon may subject his patient to a little greater risk than he runs when the limb is sacrificed.

The operation is generally not a difficult one, but it may become so, when the leg is flexed in a very acute angle on the thigh, and at the same time rotated outward. There is no necessity of a particular saw, as recommended by Butcher. One of the greatest improvements in the operation he considered the *wiring* together of the femur and the tibia, as it facilitates immensely the after treatment, and prevents some of the unpleasant accidents after the operation, for example the tendency of the lower end of the femur to project forward and outward.

As one of the great troubles in after treatment originates from the burrowing of matter, it would be worth while to consider the propriety of making, at the time of the operation, a counter-opening in the popliteal space, to lead the matter off the most direct way, and prevent its stagnation.

The after treatment is of more importance than in the resection of any other joints. The limb ought to be well secured in an apparatus which will allow as much as possible the dressing of the wound, without disturbing the position of the limb. If one of the two great points in the treatment of complicated fractures (and in this category an extremity with a resected joint must be put)—rest and cleanliness—after excision of knee joints, has the precedence before the other, it is rest. Better to have the dressing inundated with matter, and merely wipe it off, as far as access is permitted, than be over nice, and take up the limb every time the dressing is soiled. The apparatus in which the limb is placed should therefore be so constructed, that the region of the resected joint should be accessible to inspection and manipulation. He had constructed his apparatus after the one which he had seen used by Dr. J. M. Minor, of the Brooklyn City Hospital. On an iron frame, with a movable foot-board, was attached one metallic band for the support of the thigh, and another one for the leg, leaving an interstice for the region of the knee, thus giving excellent access to the operated parts. The only objection was, that it left the resected parts without sufficient support. He had therefore added a middle-piece, which, when dressing was required, would be removed, without disturbing the rest of the apparatus. The apparatus ought to be very wide and deep, so as to allow of liberal supply of soft lining, as the intention is to disturb the rest of the limb as little as possible. Nothing answers better to keep the limb in absolute rest than filling the intervals between the apparatus and the limb, and covering the last with small sandbags, as advised by Mackenzie. If the apparatus swings from a fixed point above the bed, it not only adds to the comfort of the patient, but facilitates the labor of the surgeon in dressing.

All the accidents which may spring up in the course of the treatment, are those common to resections and amputations, and must be met according to the general rules of surgery, modified by the exigencies of the locality of the operated parts.

STATED MEETING, SEPT. 5th, 1880.

JOHN WATSON, M.D., President in the Chair.

A. NEW REMEDY FOR TÆNIA.—TREATMENT OF MALARIOUS FEVERS IN CEYLON, &c.

DR. J. G. ADAMS presented to the Academy a specimen of the seed of the *Myrsina Africana* sent by Dr. Bore of the Union Dispensary, Alexandria. The article is used very extensively by the natives of Upper Egypt for the extermination of tape-worm. The seed is finely powdered, and from 3iv. to ʒj. given for a dose, mixed in a little water. This is taken early in the morning before the usual time for evacuating the bowels. In the course of an hour after, a large dose of castor-oil is administered.

DR. WARD, of the Ceylon Mission, by invitation, next referred to the manner in which he treated the malarious fevers in Ceylon. At the commencement of the cold stage, from 3ss-3 of spirits of turpentine was given with a sufficient quantity of castor-oil to act as a cathartic. Experience had taught him to rely upon this plan of treatment in preference to all others. The remedy was repeated every succeeding cold stage, and he had frequently found that no other treatment was required.

DR. H. G. DAVIS, by invitation, read an elaborate paper on "*Diseases of the Joints*," in which he set forth the necessity for extension and motion in the treatment of those affections.

DRS. SAYRE, WATSON, KRACKOWIZER, and ADAMS, made a few remarks in relation to the subject of the paper, after which, on motion of Dr. Post, the whole was referred to the Section on Surgery.

There being no other business of importance to transact, the Academy then adjourned.

Correspondence.

A REGISTRY OF BIRTHS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The law of this State, requiring the registration of births, unlike a similar act in regard to the recording of deaths, which for cities has, in many respects, proved successful, is necessarily a failure. Its first object, to exhibit the total number of births, it can never fulfil. The returns do not even approximate to the truth. To put this fact beyond question, and especially as concerns this city, we present the following figures from the City Inspector's Reports:

Recorded total No. of births in 1854,	17,979;	correct total of Deaths,	23,568
" " " 1855,	14,145	" " " "	23,043
" " " 1856,	16,199	" " " "	21,856
" " " 1857,	13,437	" " " "	23,333
" " " 1858,	13,240	" " " "	23,694

According to all medical authorities, there unquestionably were more births than deaths during the year above-mentioned. To account for the very imperfect result just indicated, which proves, as intimated above, the absolute inutilty of the existing statute upon the subject, several reasons can be assigned. The first is, a large class of confinements take place without any male or female professional attendant present, and of these no information reaches the registration office; second, the greater proportion of midwives, who officiate in numerous instances, either do not know how to read and write, or so imperfectly, as to be unable to report, consequently all births of their attendance are unrecorded; third, accouchements by medical students, which yearly amount to several hundred, are never communicated to the registering department; and fourth, very many physicians utterly refuse to comply with the law, most of whom deny the right of the public to ask statements of the extent of their obstetrical business.

Reports, which corroborate the foregoing representations, and conclusively establish the worthlessness of our present system, have been presented to the American Medical Association and the Sanitary Convention, the latter of which papers, by implication, recommends the advocacy of the passage, in other States, of a law similar to that of Rhode Island. The law alluded to is as follows:

"OF BIRTHS. Sec. 5. It shall be the duty of the clerk of each of the towns, annually, in the month of January, to collect the facts required by section third of this chapter, in relation to all children born in the town during the year ending the thirty-first day of December next preceding, and for each full report of a birth so obtained the clerk shall receive ten cents, to be paid by the town in which the birth is recorded."

This plan Boston and Providence have alike modified, so that a census is taken semi-annually of all children found within their respective city limits born in the course of the preceding six months. After a thorough trial, an opinion of the highest authority has been advanced, that "this is the only feasible method for obtaining returns of births in the cities of this country, with any approach to completeness."

With such an assurance, let us hope the medical profession throughout the Union will not wait for further data upon this subject, but will exert themselves to secure the general adoption and application of the rule in question.

WILLIAM B. BIBBINS, M.D.

NEW YORK, Sept. 8, 1860.

ARMY SIGNALS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—Major Albert J. Meyer, of the United States Army, has just been ordered to New Mexico. You know proba-

bly that he was a Surgeon in the army, but having invented a system of signals for the use of the army he was promoted to the rank of major, and made signal officer. This made it necessary that he should resign his commission in the medical staff. No system of signals has ever been employed in the army, either in this country or in any other, so far as I know, except, perhaps, among the American Indians—who employ for their purpose beacon fires and various other similar contrivances. The subject of Dr. Meyer's thesis for graduation (which thesis was published in the *Buffalo Medical Journal*) was "*Sign Language for Mutes*." It was an excellent and original paper. His attention has been directed to this subject for a long time. Indeed, when a boy, and before he studied medicine, he was for a time a telegraph operator. Under the auspices of the government he has been prosecuting his discoveries in this direction for several years; and by the last Congress a sum of money was appropriated for this new department at the head of which he is placed. He employs two sets of signals, one for the night, lighted flambeaus of a peculiar and very ingenious construction, and another for the day—white and blue flags. If the air is clear these signals may be seen with a good glass, a distance of fifteen miles. This is equally true of the night signals as of the day.

It is certainly remarkable that until now a complete system of signalling has never been introduced into the army, its utility being so manifest. If Napoleon had had a means of signalling Grouchy he might have saved his army on the field of Waterloo; and if the Emperor of Austria could have signalled his reserves, only four miles off—at Solferino—the result of that day might have been wholly changed.

H. F.

BROOKLYN, Sept. 10, 1860.

DOMESTIC CORRESPONDENCE.

CHICAGO.

September 4, 1860.

WE receive regularly the *Medical Times*, the first weekly medical journal which we read, and must confess we begin to feel an interest in it which our previous notions concerning a weekly issue had not led us to anticipate. We occasionally receive it on the Tuesday following its publication; more often, however, on the last of the following week. The Hospital Reports, the Proceedings of the Pathological Society, the New York Academy of Medicine, and Medical and Surgical Societies, are generally full of interest to us. The discussion on diphtheria by the last named society has considerably enlightened our views on that subject, and afforded us some consolation, inasmuch as we see you have not saved all your cases any more than ourselves. It has prevailed here to a moderate extent only, but sufficiently so to demonstrate clearly enough that its most severe form is a very unmanageable affection, and seldom yields to any kind of treatment. Our city, with its one hundred and thirty thousand inhabitants, and three hundred physicians, may be regarded as a model of good health, if the past four years are to be taken as the standard. During this time the city has been entirely exempt from epidemics of all kinds, with an unusually small amount of those common disorders which prevail everywhere among all classes and conditions. The profession, though doubtless not as well off in a pecuniary point of view, have, by this very drouth of business, been the more active in self-culture, in reviewing their primary studies, in reading up new works, and becoming generally better posted, in establishing societies and colleges, and getting up a little healthy active rivalry and competition, which will prove of infinitely more value to them in the end. It is to be regretted that the profession everywhere are not a little more harmonious, and do not exhibit a little more brotherly love

and affection towards each other; but it is a source of pleasure to know that even these distractions and differences all work together for good, and stimulate us as nothing else can to greater effort and more strenuous labors to advance the cause of medical science. The drones in our profession can be reached in no other way, so that, although we should not encourage an envious feeling in the great body, a little healthy local action of this kind is a positive benefit. Chicago claims to be, and we think is, the great commercial metropolis of the Northwest, occupying the same relative position to the surrounding country in respect to trade and commerce that New York does to the eastern world. We also claim for it the great central metropolis of science and arts for the same region of country, and if we are to judge on this question from the number of universities and colleges, literary, theological, and medical, it cannot certainly be otherwise. Its literary institutions are numerous, enjoying a large amount of confidence and fair degree of patronage. In medical affairs we have two medical colleges, three well arranged hospitals, two medical journals, and two regularly organized medical societies. We believe the student of medicine will here find every facility in the pursuit of his studies, and the practising physician sufficient to stimulate and keep him thoroughly acquainted with the advances daily made in our profession. The oldest medical school in this city is the Rush Medical College, organized in 1843, and successfully operated since. The whole number of students and graduates of this institution amounts to, Students 1710, Graduates 505. It is conducted on the same plan as your eastern schools, having a preliminary course in the fall, a regular course during the winter, and summer course during the spring and summer months. The students attending this school enjoy the clinical advantages of the City and U. S. Marine Hospitals. The other medical school is yet in its infancy, last winter being the first regular session. It is organized under the charter of the Lind University, a literary institution also of recent growth. It is conducted on an entirely different plan from any medical college we know of, having a larger corps of professors, and longer term. The college term is divided into a junior and senior department, the junior department intended for students attending their first course, and embracing lectures on descriptive anatomy, physiology and histology, materia medica, pathology and public hygiene, and inorganic chemistry; the senior department, intended for students attending their second course, and embracing lectures on surgical anatomy, organic chemistry, practical medicine, surgery, and obstetrics, with diseases of women and children. An attendance on one course in each department is all the college instruction necessary to entitle the student to become a candidate for graduation. The students attending this school enjoy the clinical advantages of the Hospital of the Sisters of Mercy.

The oldest medical society in this city is what is now called the Chicago Medical Society. It was organized in 1852, under the name of the Cook Co. Med. Society. It now numbers about fifty members, holds regular monthly meetings, and is generally well attended. The other medical society was organized in 1859, has forty members, is called the Chicago Academy of Medicine, and is arranged and worked on the same plan as the New York Academy of Medicine. The oldest medical journal issued in this city is the Chicago Medical Journal, which has undergone several changes in its editorship and name since its first issue in 1845, or thereabouts. The Medical Examiner is the name of the other medical periodical published here, which is not quite one year old. Both are monthly publications, and circulate principally in the Northwest. We just begin to see the premonitory symptoms of an active winter's campaign in the schools, the societies begin to show more signs of life, and the hospitals to fill up with interesting cases. When the fall term arrives, the posts all assigned, and the work begins in real earnest, we will give you some of the details; also have something more to say about our hospitals, the annual report of one having been recently published, which will admit of comment.

PILULA.

Medical News.

ARMY INTELLIGENCE.

USHER PARSONS, M.D., of R. I., a Surgeon in the war of 1812, was to be present at the Perry Monument Celebration at Clarendon, September 10th, when the battle of Lake Erie was to be represented by a mock engagement.

BARNES.—Surgeon J. K. Barnes has been ordered to repair, on or about the first of October, 1860, to the Headquarters of the Department of Oregon, and report for duty to the Commanding Officer.

KEENEY.—Surgeon C. C. Keeney has been relieved from duty in the Department of California, and ordered to repair to the Headquarters of the Department of Oregon and report for duty to the Commanding Officer.

HADEN.—Leave of absence for thirty days has been granted to Assistant Surgeon J. M. Haden, Medical Department.

HOLLENBUSH.—The leave of absence heretofore granted to Assistant Surgeon C. G. Hollenbush has been extended until March 1, 1861, for the benefit of his health.

NAVY INTELLIGENCE.

GRAFTON.—J. D., Assistant Surgeon, has been ordered to the Receiving ship North Carolina, at New York.

LYNCH.—A. M., Passed Assistant Surgeon, has been ordered to the Navy Yard, at Philadelphia.

MCCLENAHAN.—Wm. F., Surgeon, has been ordered to report for duty, at the Navy Yard, Washington, on the 1st of September, to relieve Surgeon George Clymer.

RUSCHENBERGER.—Surgeon W. S. W. Ruschenberger, ordered to the Susquehanna, as fleet surgeon of the Mediterranean squadron, was detached from that vessel on her departure for the Gulf, and is waiting orders.

ADDISON.—Surgeon S. R. Addison died on the 28th ult., at the Naval Hospital, Chelsea.

GIBSON.—Assistant Surgeon John J. Gibson has been ordered to report for temporary duty at the Naval Hospital, New York.

WHELAN.—Surgeon Whelan, chief of the Bureau of Medicine and Surgery, has been ordered on a tour of inspection, and will visit the Naval Hospitals and sick quarters between Norfolk and Portsmouth, New Hampshire.

We are authorized to state that the rumor of the resignation of PROF. WILLARD PARKER, in the College of Physicians and Surgeons, is destitute of truth.

OPERATION OF IRIDECTOMY ON SIR B. BRODIE.—Public allusion to a subject in which the profession naturally take a deep interest renders a longer silence on our part impossible, and it becomes our duty to let our readers know that the operation of iridectomy was performed on both Sir Benjamin's eyes on July 12. His sight had been failing since Christmas last, but was not painfully defective until the completion of his 78th year in June. About that time vision became rapidly more and more impaired, especially in the left eye. Up to this time the disease had been regarded as senile cataract, more advanced in the left eye than in the right, but after the return of Sir Benjamin from the meeting of the British Association at Oxford, the defective vision was ascribed to glaucoma. Iridectomy was performed under chloroform. We deeply regret to say that the result is not so satisfactory as the paragraph in the *Times* might lead the profession to hope. The left eye we believe to be much in the same state as before the operation—if anything slightly improved; but in the right, or better eye, vision is quite lost. The great ground of hope in this case is that as there is now a cataract very evident in the right eye, this is the cause of the impaired vision,

that the eye is not glaucomatous, and that hereafter vision may be restored by extracting the cataract. We have not alluded to this subject before, as it is to some extent a private matter; but the whole profession have so filial an interest in all that relates to the respected President of the Royal Society and of the Medical Council, that all have a right to know as much as is freely talked about in the medical coteries of the metropolis—especially at the present time when a comparatively new operation like iridectomy is on its trial.—*Med. Times and Gaz.*

EPIDEMIOLOGICAL RECORD.

HEALTH OF NEW YORK, DR. WM. B. BIBBINS, of the Demilt Dispensary, writes, Sept. 12.—This city has not experienced a more healthy summer, than that just passed, for many years. It may, unquestionably, be called "the healthy summer." The proportion of acute to chronic cases of disease has been much less than during the most favorable previous corresponding seasons. Cholera infantum, diphtheria, and scarlet fever have prevailed but in a very limited degree. As might be expected in view of the exemption from morbid agencies during the preceding hot months, the smallest comparative number of cases of illness are reported at present date.

EXTREME HEAT has been experienced in several of our western cities. At St. Louis, Mo., during the week ending July 23d, the thermometer ranged from 100 to 106 degrees in the shade. On Saturday, the 21st, it rose to 107 degrees, about 20 degrees hotter than it was at the same time in this city, where it was quite too hot for comfort.—*Cent'y.*

HEALTH OF NEW ORLEANS.—Through the public prints the world has been told that yellow fever is amongst us. Let us look at the official reports. For the week ending July 22d, one more death is reported. For the week ending July 29th, one more death is reported. For the week ending Aug. 5th, three deaths are reported. Thus, yellow fever would seem to have been in our midst for four weeks; and yet, during that time, and right in midsummer, with a sun shining hotter than ever was felt by "the oldest inhabitant," it does not increase, and fails to make its appearance in the Charity Hospital. But more than this, at this present moment, Aug. 15th, we have before us the mortuary report for the week ending Aug. 12th, wherein is found the report of one death from yellow fever; showing an actual diminution of the mortality. With due deference, then, for those physicians who think they have seen the disease this season, we must be allowed to say that we do not believe there has been a single case of the disease. Old practitioners, of the highest respectability, and in full practice, tell us they have not seen a case; there has not been one in the Hospital (that sure index of the city), and the history of those cases said to have occurred, in their manner of appearing, carries conviction to our mind. A word about sunstroke and apoplexy. All our readers know that throughout the South this has been the hottest summer known. New Orleans has been the recipient of her full share of solar heat, and we find it recording itself in the mortality list. Beginning on the 1st of July, we find the deaths by sunstroke set down weekly as follows: July 8th, 7; 15th, 42; 22d, 4; 29th, 4; Aug. 5th, 2. At same time the deaths from apoplexy were as follows: July 8th, 12; 15th, 40; 22d, 3; 29th, 7; Aug. 5th, 3. Now, any one who has ever paid the slightest attention to the mortality statistics of our city; who, at the same time, will recollect the very loose manner in which diagnoses are made and recorded by medical men; and who will not forget that apoplexy is really a comparatively rare disease, will readily agree with us that far the greater number of cases recorded as apoplexy were really sunstroke; and we may safely say that for the week ending July 15th, between seventy-five and eighty cases of sunstroke occurred! Comment is unnecessary. Such extreme heat must have been felt to be appreciated.—*N. O. Hospital Gazette.*

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 1st day of September to the 8th day of September, 1860.

Deaths.—Men, 84; women, 94; boys, 189; girls, 147—total, 514. Adults, 178; youths, 8; children, 228; males, 278; females, 241; colored, 12. Infants under two years of age, 247. Among the causes of death we notice:—cholera-infantum, 79; cholera-morbus, 6; congestion of brain, 5; infantile convulsions, 21; diarrhoea, 18; dysentery, 10; scarlet fever, 21; typhus and typhoid fevers, 12; whooping-cough, 6; inflammation of brain, 8; of bowels, 9; of lungs, 8; of throat, 12; measles, 10; small-pox, 7; phthisis, 69; dropsey of head, 16; infantile-morasmus, 43. Classification:—brain and nervous system, 82; respiratory, 117; digestive, 182.

The number of deaths compared with the corresponding weeks of 1856 and 1859, and of last week, was as follows:—

Week ending Sept. 11, 1858.....	588	Decrease.....	74
" " Sept. 10, 1859.....	586	"	44
" " Sept. 1, 1860.....	524	"	10

SEPT.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	°	°	°	"	"		0 to 10	In.
2d.	30.11	.14	57	70	68	12	16	N. by W.	0	
3d.	30.10	.04	56	71	64	12	16	N. by W.	0	
4th.	30.14	.08	67	75	72	9	14	S. by W.	5	
5th.	30.07	.10	68	82	75	8	11	S. by W.	5	.008
6th.	30.01	.04	68	83	76	7	10	S. by W.	3	
7th.	29.97	.10	74	86	75	7	11	S. by W.	3	
8th.	29.81	.17	70	88	75	6	10	W. by N.	6	.16

REMARKS ON THE WEATHER.—The first two days of the week very pleasant, and the others sultry. The wind was generally calm, A.M., light, P.M. The first appearance of the Autumnal "Auroras" was on the evening of the 5th. With an unclouded moon in the East a broad column of yellowish white light extended for several hours from the margin of the Western horizon to the zenith. The week concluded with light rain, A.M., a hard shower 8 P.M., and a change to cool weather at midnight.

MEDICAL DIARY OF THE WEEK.

Monday, Sept. 17.	{ CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Taylor, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Sept. 18.	{ CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M.
Wednesday, Sept. 19.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Meir, half-past 1 P.M. ACADEMY OF MEDICINE, 8 P.M.
Thursday, Sept. 20.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Thomas, 12 M.
Friday, Sept. 21.	{ CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M. SURGICAL SECTION at Dr. J. R. Wood's, 8 P.M.
Saturday, Sept. 22.	{ BELLEVUE, Surgery, Dr. Mott, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

ORDER OF LECTURES IN THE PRELIMINARY COURSE OF THE UNIVERSITY MEDICAL COLLEGE.

Monday.	{ Dr. THOMAS, Medicine, 11 A.M. Dr. ATLETT, Physiology, 12 A.M. Prof. BEDFORD'S Clinique, Dis. of Women, 2½ P.M.
Tuesday.	{ Prof. DRAPER, Poisons and their Tests, 11 A.M. Dr. GOULEY, Micros. Anat., 12 A.M.
Wednesday.	{ Dr. DONAGHE, Vener. Disease, 11 A.M. Dr. ATLETT, Physiology, 12 A.M. Dr. THOMAS, Med. Clinique, 2½ P.M. Prof. VAN BUREN, Genito-Urinary Organs, 3½ P.M.
Thursday.	{ Prof. DRAPER, Poisons, 11 A.M. Dr. GOULEY, Micros. Anat., 12 A.M.
Friday.	{ Dr. THOMAS, Th. and Pr. of Medicine, 11 A.M. Dr. GOULEY, Micros. Anat., 12 A.M.
Saturday.	{ Prof. POSE, Surgical Clinique, 11 A.M.

Original Lectures.

CLINICAL LECTURES ON AMPUTATION.

DELIVERED AT THE NEW YORK HOSPITAL.

BY

JOHN WATSON, M.D.,

ATTENDING SURGEON.

LECTURE III.

In our last lecture we took up the subject of operations for amputations, and went over some practical points which were worth remembering in that connexion. I now propose to give you a summary view of the various accidents and constitutional disturbances which are consequent upon such operations.

A patient who has had an operation performed upon him always has a certain amount of disturbance of the general system in consequence; in other words, he suffers from a shock which in character is the same as that following any other mechanical injury. The severity and duration of these disturbances vary in different individuals, but have reference more particularly to the character and extent of the operation. I make these remarks only in passing, but shall take another opportunity of referring to the subject of shock when we come to speak more particularly of disturbances of the nervous system. I intend in the present lecture to confine myself as far as possible to the consideration of all such accidents as are directly connected with the vascular system.

How will you commence to treat your patient now that you have operated upon him? He is suffering from general prostration, and you at once see the necessity of following out the indications, to bring about a healthy reaction. For this purpose you keep him at rest, allow him brandy, perhaps carb. ammonia, and give him a hot air bath by applying the heater. This treatment is continued until reaction comes on. Reaction is an effort on the part of Nature to make reparation for an injury; the skin becomes warm, the pulse steadier and fuller, and the patient expresses himself as feeling more comfortable. Now this condition of the system is very apt to become exaggerated, and not unfrequently we are called upon to modify it by appropriate measures, otherwise the result may be irritative or inflammatory fever. In such cases all stimulation is suspended, and we adopt another plan of treatment by administering mild diaphoretics, such as spts. Mindereri, or a moderate dose of Dover's powder, keeping the air fresh and cool, and the diet mild and spare. Inasmuch as this excess of action may have a direct relation to the condition of the parts operated upon, we are to guard against any excess of local inflammation. Accordingly, we make use of cooling applications, and the best is cold water. You will not unfrequently find it of service to combine alcohol with the water in the proportion of one to four. If the surrounding parts have been previously bruised, a drachm of the muriate of ammonia to a pint of water may be used instead, by way of stimulating the absorbents. Change your cloths on the affected part frequently, never allow them to become dry, by so doing you keep them clean and at the same time give comfort to your patient. The next step is to favor the position of the stump so that there is no greater afflux of blood to the part than is necessary to bring about reparative action. To this end you place the stump horizontally, being careful not to elevate it too much. A small cushion will raise it sufficiently.

If matter is allowed to gravitate towards the body serious constitutional trouble will follow. I recollect being called in consultation in the country to see a lady with a tumor in very close proximity to the knee-joint. An operation

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was decided upon, and I removed the mass. In my solicitude to prevent the fluid from gravitating into the joint, I directed the limb to be placed on a double inclined plane. In consequence of this the effused fluids burrowed beneath the vastus externus muscle, but gave no signs of their existence until ready to point over the trochanter major. By a change of the position of the limb, and proper application of dressings, and attention to the diffuse abscess which formed, the patient ultimately recovered with a good limb.

One of the most common accidents after operations is erysipelas; this is particularly the case in hospital practice. It may originate as a local or a constitutional ailment. It may be caused by a want of cleanliness in dressings, or in the wound itself, by preventing the escape of morbid effusions, or it may arise from a crowded state of the hospital ward, the patient being subjected to all the deleterious effects of a bad atmosphere. In short, anything that tends to a local derangement, or to impairment of the general health, may give rise to it. Experience has taught us that those patients whose beds are against the wall, or in the corners, are more apt to suffer than those who are placed differently, for the reason that the emanations from the body are allowed to stagnate, owing to the want of a proper circulation of air. Hence we never allow a bed to touch the wall. Erysipelas is preceded by a marked chill, a greater or less febrile action, a coated tongue and nausea, then a peculiar efflorescence makes its appearance.

The seat of the injury or amputation is generally the first part affected, but this is by no means the invariable rule. The disease may be very mild, merely confined to the surface of the skin, or it may extend deeper, involving the cellular tissue, tendons, fasciæ, or muscles. Sometimes it extends from the neck into the fauces, and gives rise to oedema of the glottis and other serious complications. In the simpler forms of the disease mild diaphoretics and aperients are all the treatment required; while on the other hand, where a typhoid condition of the system exists, you are called upon to give all the support and stimulation that your patient can bear. The gravity of the constitutional disturbance may be often measured by the color of the inflamed parts;—when the color is a light red, the attack is not so alarming as when it is of a deeper hue. In the worst cases the integuments fall into a state of gangrene, and finally slough, and so also may the muscles and deeper tissues. Erysipelas may also produce a bad effect locally, for instance in a stump; the destruction of tissue may be so great that reamputation is called for. Again, in the neighborhood of a joint, by the extension of the inflammation, it may cause suppuration of the joint and its consequences. The patient, you remember, who had been subjected, after amputation, to that objectionable novelty, acupuncture, had, in consequence, suppuration in the track of each needle. This was followed by diffuse erysipelas, and by suppuration of the knee-joint. You remember I evacuated from that joint more than a pint of pus, and the patient ultimately sank from phlebitis and other constitutional disturbances resulting from this local difficulty. I have often in other cases seen erysipelas give rise to suppuration in the joints around which it happens to exist. The ankle, elbow, and wrist, are the joints most frequently attacked in this way; but, as in the case just mentioned, you see the knee is not exempt. Erysipelas also extends its influence to the internal organs. When on the scalp, the brain is apt to suffer; when on the chest, the pleura or pericardium; when on the abdomen, the peritoneum. I recollect a case in which it swept along the whole of the left side, from the clavicle to the groin; the patient died, and immediately under the external disease I discovered, after death, inflammation of the pericardium, pleura, and peritoneum, the limits of which were exactly measured by the limits of the external erysipelas.

Angeioleucitis, or inflammation of the absorbent vessels, is another accident of common occurrence after amputations, and frequently goes hand in hand with erysipelas. This modification of unhealthy inflammation may follow operations upon any part of the body, but is most frequent after

injuries of the hand and face, or those low down on either the upper or lower extremities. From such points lines of inflammation, as if produced by the stroke of a whip, extend in the course of the absorbent vessels, and in connexion with these lines will be observed hard and painful swellings, involving the lymphatic glands in the neighborhood. When small and movable these glands are characterized as kernels, or adenitic tumors; and when of greater dimensions, firmly fixed, and progressing to suppuration, they are at some points, as at the groin or axilla, spoken of as buboes. The constitutional disturbance attending this disease is, at first, that of a high inflammatory fever, but of temporary duration, ushered in by chills and rigors, and subsiding in profuse perspiration. Angioloecitis is rarely of itself fatal, but by giving rise, as it sometimes does, to erysipelas or to suppurative phlebitis and purulent cachexia, it may be indirectly the cause of death.

We are naturally led from the consideration of angioloecitis to take up the subject of suppurative phlebitis, as another one of the unpleasant occurrences that supervene upon an operation. The veins under healthy reparative inflammation become closed either by the coagulation of blood within them or by the effusions of coagulated lymph. But under unhealthy inflammation the plastic lymph is not effused, and the inflammatory action once established on the inner surface of these vessels, spreads indefinitely, and proceeds to suppuration. Their morbid effusions now mingle with the blood, or contaminate that fluid by imbibition, giving rise to a febrile and depraved condition of the whole system, with a tendency to form abscesses and sudden collections of pus in almost every part of the body, more particularly the lungs and liver. It is not uncommon to find both lungs studded with abscesses, varying in size from a pea to a horse-chestnut, or even larger, which form within a few days and rapidly lead to a fatal result. The slightest injury is sometimes sufficient to bring about this state of things. I have seen it after applying a ligature to an inflamed pile, and on several occasions after tying or dividing varicose veins, and several times after tying the femoral artery where the femoral vein happened to be abraded. The symptoms of purulent cachexia are easily recognised; there is a febrile action coming on at irregular intervals, daily, or perhaps two or three times in a day; and not unfrequently while the skin is hot, the patient may be shaking with rigor. The fever is irregular in every respect. Generally the first thing that calls your attention to the dangerous condition of your patient, is the occurrence of a chill. This is always a significant symptom, but it is so more especially when you have any reason to suspect the advent of purulent cachexia. You then watch your patient. In a day or two, possibly in less time, you have some indication of the presence of matter in some part of the economy. Purulent cachexia, otherwise called purulent infection and pyæmia, is always rapid in its progress when once developed, but it does not always make its appearance in the early stage of the local disease which gives rise to it.

When reaction exceeds the bounds of health, it is very apt to terminate in fever. Traumatic fever may assume almost any type: the open inflammatory, the ephemeral, the irritative, the suppurative, the continued, the irregularly intermittent, and the paroxysmal. In association with the reparative inflammation it will assume the continued form, though even here it is sometimes paroxysmal. When the inflammation is unhealthy the fever is more apt to be paroxysmal and irregular, with a tendency to the rapid exhaustion of the vital forces. The severity, as well as the type and duration of the fever, is somewhat dependent on that of the inflammatory action with which it is associated. Unhealthy inflammation is sometimes the precursor and sometimes the consequence of constitutional disturbance, but the fever associated with healthy inflammation is almost always determined by the local ailment alone, unless secondary complications supervene; and when there are no such complications, it terminates before the subsidence of

the local disease. An injury of moderate severity in a healthy constitution will be attended by the open continued form of fever; an injury of severer grade, where the powers of resistance on the part of the system are less, will be followed by the irritative or by the typhoid fever. Injuries associated with profuse suppuration will be followed with irregular paroxysmal attacks, and intercurrent chills and sweats. Ephemeral fever is that most frequently seen in connexion with injuries of the urethra, consisting of chills, hot stage, and sweating, and then passing off never to return, except when the circumstances giving rise to it are again present. It is often met with after the introduction of a catheter or bougie into a urethra already in a state of irritation. So much then for traumatic fever. When persons die after high constitutional disturbance from local injuries, you are almost always sure to find in the post-mortem examination, that secondary inflammations and congestions have led directly to the fatal issue. These are most frequently found among the thoracic viscera, but not exclusively there; the peritoneal cavity, the mucous surface of the large intestines, and even the synovial sacs under these circumstances may be found in a state of suppuration. Indeed, it is rare to find a case of death after local injury where reaction has followed the injury, in which some of these complications do not exist. The closing scene is often marked by a colliquative diarrhoea.

Having thus disposed of those disturbances which are more particularly connected with the vascular system, we are now ready to occupy the remainder of our time in the consideration of those accidents which relate to the nervous system. We shall only allude at present to the disease known as "lockjaw," or tetanus. This disease is occasionally quite frequent in its occurrence, but is by no means so fatal in its issue as many suppose. It may come on at a longer or shorter interval after any accident or local injury, and does not seem to bear any relation to the character or extent of the injury; the slightest scratch is oftentimes a sufficient exciting cause. In certain localities there is found a marked tendency to its development, for instance on the southern shore of Long Island. It is frequently associated with cold, and persons who are in any way liable to the disease, should be warned of the danger that might result from any imprudent exposure. Tetanus may supervene after a wound has entirely healed over, by irritation of the cicatrix, and may go on to a fatal termination. Death sometimes takes place, 1st, suddenly from asphyxia, either by spasm of the glottis or respiratory muscles generally; 2dly, by invasion of the involuntary muscular system acting directly upon the centre of the circulation, and stopping the pulsations of the heart; and, 3dly, by a gradual exhaustion of the vital powers from the frequent spasms. I only wish to refer to the disease as one of the complications liable to occur after operation, trusting that you will look it up for yourselves in the various text-books on surgery. In the next lecture I hope to finish up all I have to say in a general way upon the subject of amputations.

IODINE, according to M. Boinet, preserves, cures, strengthens, and modifies the constitution, removes diathesis, and impresses a new energy in the organism. Iodine, according to M. Rilliet, weakens, deteriorates, wastes, destroys, atrophies, and kills!

Last year M. Beau discovered that lead was an excellent remedy for phthisis. M. Broeckx, of Antwerp, has tried the mineral extensively, and has found it worse than useless!

M. Chatin lately informed the French Academy, *à-propos* of iodine, that Coindet had by its use reduced so many women to the condition of Amazons, and had brought such a number of men into the state described by M. Ricord under the term "haricoccele," that he dared not show himself in the streets of Geneva, through dread of suffering the martyrdom of St. Stephen.—*Brit. Med. Jour.*

Original Communications.

REPORT ON PLEURO-PNEUMONIA.

By G. GRANT, M.D., NEWARK, N. J.

It is admitted by all who believe and advocate the existence of a *contagious* pleuro-pneumonia, the recent cause of so much excitement, that it originated in a shipment of cattle by Mr. Chenery of Belmont, Mass. It appears that those cattle were taken from a herd in Holland, in which there was no disease. There was none in the district, and none in the whole country, except a disease called "phthisis;" but there is no evidence to show that this is the same disease called incorrectly by another name. It was absent from that locality, and it is a fact that large numbers of cattle are imported to the United States without bringing any such disease at all.* The animals were well, in good condition, and it is fair to presume that one of the points in their selection was their health and vigor. These facts appear in the letter from Mr. Chenery, which is subjoined. During a voyage of forty-seven days the animals confined in close air (probably in the hold of the ship) with insufficient or unwholesome nourishment, or both, laboring in filth with fatigue and distress, were exposed to the conditions of a true typhus, in other words, ship fever. Mr. Chenery is so well satisfied that his animals' bad condition, "bruised and emaciated," was due to bad treatment and neglect on the voyage that he labels the vessel. Of these four cows, one was killed immediately, another was killed nine days after arrival, the third twenty-seven days after arrival, and the fourth is now living in good condition. From these animals it is alleged has sprung the disease which has prevailed throughout the state of Massachusetts. In the presence here of all the conditions of true typhus fever occurring from its natural and ordinary causes, filth and animal miasm, with the susceptibility from distress and bad treatment, and the entire absence of any identified contagious disease from which it had its origin, I do not think that this disease, called pleuro-pneumonia, can be considered as a specific or contagious disease, at least as yet, from the observations that have been made. The post-mortem specimens, shown to me at the Boston State House, were similar to what is observed in the human subject in cases of typhus pneumonia. The testimony of several of the veterinary surgeons of Boston, as given before the legislative committee of Massachusetts on this subject, and repeated before this commission, was to the effect that the post-mortem appearances of these cases were such as are commonly seen by them in subjects not affected by this alleged disease. There was uniformity in the testimony in this respect. In all the investigations that have been made, and the observations that have been taken by those residing in the locality of the disease, the facts are noted only that refer to the few animals that have been imported, and those that have been placed in contact with them. In this inquiry, all facts, though a multitude in number, that do not bear out this prejudged theory of a deadly contagious scourge, are ignored or overlooked. And it is remarkable that the notes thus made are few in number, and the observations unsatisfactory and contradictory.

After the most careful inquiry, nothing would lead us to believe that the cases which are alleged to have occurred in the state of New Jersey are anything but isolated sporadic disease of the lungs, which may occur among cattle at all times and seasons, and especially among those who have not good food, air, running water, and good pastures. In times of popular panic all widely spread epidemics are believed by the populace at large to be contagious. This has been the case in regard to cholera in modern times, in regard to leprosy in old times, in regard to certain pes-

tilential fevers at various times. And the public have acted upon this persuasion, and sick individuals have been avoided, neglected, and fled from, as prolific fountains of contagious disease.* And yet these epidemics are now known and admitted, by the intelligent part of the medical profession, to be non-contagious. Would it not be well, before yielding to the excitement, and adopting any of the suggestions which have prevailed in Massachusetts, to submit this matter to a more painstaking and rigid examination? All of which is respectfully submitted.

LETTER OF MR. CHENERY REFERRED TO ABOVE.

Boston, Aug. 11, 1860.

DR. G. GRANT, Newark, N. J.

Dear Sir—Your esteemed favor of the 7th inst. is received, and I take pleasure in answering your inquiries.

On the 24th of last January, I addressed a letter to my correspondents in Holland, in relation to the disease that had been so fatal amongst the cattle at my "Highland Stock Farm" in Belmont, inquiring whether the disease known as "pleuro-pneumonia" had prevailed in the particular locality where the four cows to which you refer were obtained. In due course I received an answer to that communication, stating that no disease had prevailed in the particular stables where my cows were procured, but that there was existing throughout the whole country a disease known as "phthisis," a "pulmonary disease," with which cattle, when infected, suffer a long time before it is observable. This disease is undoubtedly the same as that denominated here "pleuro-pneumonia." The four cows were not affected at all prior to shipment, but were to all appearance in the *very best condition* when put on board the ship at Rotterdam. They were obtained at Pumerend and the Beemster, in the north of Holland, and great care was taken in their selection. It may, however, be remarked that the cows were detained some two weeks at Rotterdam, having arrived there before the vessel was ready, and the presumption is that the infection was communicated to them there, inasmuch as large numbers of cattle are understood to be kept there, and fed upon the slops from the gin distilleries located at that place.

You have the report of the evidence given before the joint committee of our Legislature at the late extra session, and I am not in possession of any new facts of importance in relation to the disease, that have not been made public. I will, however, allude to one important case that may have escaped your notice. It will be remembered that, during the session of our Legislature, great excitement existed in the state of New Hampshire, caused by the report that a yoke of oxen, belonging to me, had imparted the disease to a herd in the neighboring town of Lexington, and that it had been carried thence to that state. The Lexington cows, that were supposed to have taken the disease from my oxen, were slaughtered by order of the commissioners, a short time ago, and found, on post-mortem examination, to be perfectly well, thus demonstrating that all the reports relative to diseased animals slaughtered in that state were entirely without foundation.

As regards my own herd, I would say that not a case of active disease has occurred at my farm since last January. An injunction was put upon my herd on the 16th of last April, by the "commissioners for extirpating the cattle disease," and consequently, the cattle have since that time been confined to the stables—yet they have, without exception, improved in appearance up to this time, and, within a few days have been examined by "eminent veterinarians," and all but three pronounced free from disease; and yet it is a remarkable fact that this whole herd, excepting three animals, were, on the 16th of last April, considered, by our commissioners and their "experts," very much diseased. If their diagnosis was correct at that time, nature must have been performing wonderful cures, as no doctors have been employed nor medicine administered since.

* See report of evidence before extra session Mass. Legislature, 1860.

* Dr. Bigelow of Boston.

The commissioners disposed of my herd last week by isolating ten of the animals (including the best of my Dutch stock, which they allowed me to retain), and the balance of the herd they condemned, but retained for the present in anticipation of the organization of the Medical Board of Examiners, under our new law, supposing some of the animals would be required for their experiments.

Those persons most competent to judge in the matter, seem divided in opinion as to the future of the disease here, in Massachusetts, some believing that many of the exposed animals have latent disease, which will become active during the cold weather of the coming autumn, while others hold to the opinion that the disease has had its "run."

I am, very respectfully, yours,

WINTHROP W. CHENERY.

[Our readers will observe that neither Dr. Grant's Report nor Mr. Chenery's Letter states any facts that disprove the hypothesis of special infection, or the importation of a contagious disease from Holland. That the malady which recently attracted attention in New Jersey was simple idiopathic or sporadic pleuro-pneumonia, such as is liable to occur under like circumstances at any time and in any place, appears very probable. Pulmonary and typhus affections are liable to occur both sporadically and endemically among cattle, as well as in the human race, without the aid of contagion. And we have no doubt that cases of acute pleuro-pneumonia and infectious idiopathic typhus may at this moment be found in almost every overcrowded distillery stable in the United States. But it should be borne in mind that the epizootic which in Holland is known as "phthisis," and in France, England, South Africa, and other countries is denominated "pleuro-pneumonia," is essentially different from the ordinary "peripneumonia" and typhus of cattle. And the question of its contagious or infectious character, wherever the malady has existed, certainly appears to be as conclusively determined as the facts relating to the infectious propagation of typhus in man. Both are manifestly specific diseases, and capable of being propagated from and by the sick—types of diseases that are positively infectious, but which, like all the infectious and contagious maladies, *except variola*, are not necessarily and invariably communicated to a majority of the individuals exposed—the propagation of the disease from the sick always being dependent upon contingencies. Our readers will note the straightforward statements of Mr. Chenery in reference to the conditions or *contingencies* that served to develop the fatal malady in his imported herd. Epizootic "phthisis" was prevailing throughout Holland, as he states in his letter to Dr. Grant, and, as he justly believes, that disease was developed in his imported stock by peculiar endemic influences and exciting causes during a long delay in Rotterdam and a protracted sea-voyage to Boston. The fact that only a portion of any particular herd is usually attacked with this disease, does not militate against the hypothesis of its being a positive infection. A few years ago this subject was submitted to a satisfactory test by the French Scientific Commission on "Epizootic peripneumonia." Forty-six cattle in perfect health were brought into immediate contact with a few members of a sick herd. Of this number, fifteen contracted the disease; ten others manifested incipient symptoms, but speedily threw off the effects of the virus; twenty-one appeared entirely unaffected by the exposure; three of the susceptible class eventually died with the disease, and presented its pathological evidences,

Eighteen of those that escaped death in the first exposure, were subjected to a second and a third exposure, and these escaped as follows:—four experienced slight indisposition, nine were uninfluenced in all the exposures from the first; and the five individuals that had suffered at first remained entirely unaffected by subsequent exposures. And as the result of all the experimental observations of that learned Commission, the following instructive facts were clearly established:—that forty-five out of one hundred animals, when voluntarily exposed, were found to contract peripneumonia; twenty-four others experienced some indisposition; and thirty-two escaped altogether.

That special endemic influences or an "epidemic meteoration" has at times preceded or promoted the propagation of this epizootic is highly probable; but that the disease has repeatedly been conveyed from place to place by the sick, and especially that it was imported from Holland into England, Denmark, and South Africa, as well as into the United States, there appears to be abundant and conclusive evidence. For information in detail upon this subject we would refer our readers to the excellent report of Dr. E. H. Greenhow, of London, and to the Minutes of Evidence, recently published in Boston. But in all investigations relating to evidence of infection or contagion, the medical inquirer needs to take individual conclusions and opinions *cum grano salis*, and should search very rigidly into the natural history of alleged infections, and the proximate and contingent conditions or causes of their propagation. We are glad to see that Dr. Grant has commenced his investigations in this spirit.

As our present convictions lead us to differ from the doctor's conclusions we will state a few points of difference—in the form of queries to be answered:—Why have the most unprejudiced and scientific investigators in France, Great Britain, and Denmark, arrived at the conclusion that this malady is contingently infectious? Why has the complete insulation of a healthy herd invariably been found to afford perfect protection from the pleuro-pneumonia when prevailing in the neighborhood of such herds? Why has that disease spread so uniformly and so exclusively in connexion with the diffusion of cattle from the herds in endemic districts? Why is the peculiar and characteristic lesion of encysted masses of the lungs never seen except in the pleuro-pneumonia that is alleged to be infectious?—ED.]

THE principal use which the Chinese make of opium is to smoke it with tobacco, when it produces a languor said to be exceedingly pleasing. The evil effects of this have been generally very greatly exaggerated. It is only its abuse, as with many of the good things of this world, that leads to the complete attenuation of frame and prostration of faculties that are said to characterize all who follow the practice. Hundreds of thousands of Chinese continue to smoke opium for the term of their natural lives without any apparent injury to mind or body. In the smoking saloons of Canton, opium is retailed to customers at its weight in silver; the metal is put in one scale and the drug in the other, and weight for weight exchanged. It will therefore be apparent that, in a country where money is of so much value, it is only the richer portion of the population who have the means to carry such an expensive luxury to excess. There is no room to doubt that if the government of India abandoned the opium monopoly and allowed the drug to be produced freely all over Hindostan, the Chinese consumption would thereby be greatly increased, as well as the injurious effects which it is said to occasion.—*Merchants' Magazine*.

Reports of Hospitals.

PENNSYLVANIA HOSPITAL.

CLINICAL REMARKS ON COUP DE SOLEIL.

[By J. F. MEIGS, M.D., Attending Physician.]

THIS affection is variously known by the names of *Ictus Solis*, sun stroke, heat asphyxia. *Symptoms.*—It is characterized by a hot dry skin; a sense of constriction of the chest with labored breathing, great prostration, with inability to answer questions without weeping, even in the strongest and most robust; tumultuous action of the heart, with strong pulsation of the carotids; pulse very variable, never full and hard; headache, especially on the top of the head; the conjunctiva injected; pupils acting to the light, unless during convulsions or coma, when they are fixed and contracted (in several instances they have been observed to dilate suddenly, after having been fixed and contracted); the countenance is generally pale at the commencement, but in several instances (fatal cases) it assumed a leaden hue; the urine is never entirely suppressed, but is passed off involuntarily, guttatum; the bowels are generally costive, but occasionally are perfectly natural. There is also a great desire to sleep; so much so, that if not checked, it passes into coma, which almost invariably terminates in death. During the coma, loud moaning is always present. Death ensues instantly, or from coma. Sometimes the patient is seized with maniacal symptoms; at others, he laughs unnaturally, then becomes alarmed and excited if spoken to, and any attempt at deglutition brings on convulsions.

Post-mortem Examination.—The chief abnormal appearance is an excess of venous blood in the brain and congestion of the lungs and liver. Dr. Boisliniere, Coroner of St. Louis, in a report of seventy-two cases examined by him and published in the Medical and Surgical Journal of that city, says, the necropsies revealed the following conditions:

External Appearances.—Marked lividity of the skin; neck and anterior part of chest became soon of a purple or blue color; in a few hours the abdomen was quite tympanitic, an abundant froth came out of the mouth and nostrils, resembling thick lather, mixed sometimes with a little blood. By pressing upon the chest, blood could be made to flow freely from the mouth and nostrils. The lungs and heart were in every case seen to be more or less congested; the right side of the heart and the pulmonary artery generally contained black and liquid blood; left side empty; on section, the lungs were found to contain an abundant quantity of frothy mucus, mixed with more or less arterialized blood. By moderate pressure on the chest, as above observed, this bloody froth could be made to run out freely from the mouth and nostrils. So characteristic was this appearance, that from its presence alone, many post-mortem examinations towards the end of the summer were dispensed with, the jury, after a short explanation, being able to make a satisfactory verdict of death by sun-stroke. The brain was generally found normal; in a few cases only, there was moderate congestion of the superior cerebral veins and of the sinuses. This, the author accounts for, by the difficulty the blood found in returning from the thoracic organs, already full of venous blood. The liver and spleen were, as a rule, enlarged; the latter particularly, softened. Dr. B. regards as the cause of this affection, a hot and rarified atmosphere, want of oxygen; as he says, the disease occurs in the house as well as when exposed to the sun. Hence he concluded that rarified, or poorly oxygenated air, is the "*conditio sine qua non*" of sun-stroke.

Treatment.—The chief point is to arouse the nervous system, which is best accomplished by pouring cold water from a height over the head and the nape of the neck, and dashing it over the face and chest as long as there is any tendency to coma or sleep. Sometimes, the patient may be

roused by speaking to him and shaking him, if necessary. When he can swallow, brandy and ammonia may be administered liberally. The Indian surgeons give croton oil and calomel to act on the liver and move the bowels. At this institution, the turpentine injection is given. For the weight and distress at the scrobiculus cordis, the best means will be the rubbing of turpentine for some time over the chest and stomach, with sinapisms to the legs and stimulating enemata. The after treatment consists in the employment of good nourishment and stimulants, as arrowroot, beef tea, wine, brandy, and ammonia; cold to the head, blisters to the nucha, and acting on the liver and the bowels. The patient is not to be considered out of danger until his skin has become cool and moist. Venesection has been found almost, if not always, injurious and fatal by the Indian surgeons. Cupping to the back of the neck, when external nervous congestion is marked, has sometimes been thought useful. But two cases had occurred this summer at the hospital, one of which was fatal in fifteen minutes, and presented all the appearances as mentioned by Dr. B. The other case was a young man, aged 20, very healthy, brought in August 11th, and had perfectly recovered by the 13th. The day previous, he had had a slight diarrhoea. While engaged at work on the roof of a house, his eyes became dim, he felt very weak, and fell into a state of insensibility. He was given immediately upon his admission R Spt. Vini Gall., Aquæ aa f ʒ ss., Ammonii Aromat ʒ j. M. Half of this, every fifteen minutes. Along with this, an enema of turpentine f ʒ ss. Saponis ʒ j., Aquæ Oj. was given, and sinapisms were applied to the epigastrium. He rallied very speedily, and was discharged cured on the 15th.

BELLEVUE HOSPITAL.

PULMONARY FISTULA.

ELLEN MURRAY, 35 years of age; no hereditary tendencies; has generally enjoyed very good health prior to her admission to the Hospital on the 15th of June, 1858, for continued fever. She continued in the Hospital until August 28, when she was delivered of a healthy boy after a very easy labor of only eight hours' duration. Two weeks after her confinement she took cold, which was followed by an attack of pleuritis, for which the usual treatment was employed. The case did not progress well. Paracentesis thoracis was performed, and there continued to be a discharge from the opening for three months. Patient took her discharge on the 15th of May, 1859, with directions to use the best food she could obtain, and avoid exposure. At the time of her discharge from the Hospital there had been no discharge from the pleural cavity for two months, the opening having entirely healed. August 21.—Patient was readmitted to the surgical wards of the Hospital with the left breast swollen to nearly four times its normal size; it was red, tender, and had a distinct fluctuation. As she had not nursed her child, and had received no blow upon the breast, this swelling was decided to be an abscess. She had the appearance of a person in the last stage of phthisis; coarse crepitus was heard over the whole of the left lung. On opening the abscess bubbles of air passed out with the pus. August 23.—The expectoration, which had been profuse, had almost entirely ceased, and the discharge flowed from the opening in the breast. On pressure the air can be felt crackling under the finger, in the same manner as in the emphysema following a fracture of the rib. On coughing, little bubbles of air pass out from the opening which has been made in the breast. It continued open, and the pus discharged freely, patient often turning on the diseased side to favor the discharge, till Oct. 2, when the opening closed. Immediately the patient commenced expectorating, filling in the course of the day a pint cup with the characteristic sputa of phthisis; previous to the closure of this opening she had not more than one or two sputa daily. Her treatment has been tonic and sustaining. The patient continued

expectorating in this profuse manner for three days, when the pulmonary fistula re-established itself, and the expectoration ceased. Oct. 15.—Patient very feeble; ordered 3 ss. ol. morrhue in 3 ss. tr. cinchonæ co. It was found that the patient, under this treatment, was able to take and retain cod liver oil, and the dose was soon increased, so that she took 3 ss. three times a day with the tr. cinchona co. The opening would often close, and the patient would then expectorate, but when it again opened the expectoration would cease. She left the Hospital in very good health, the following note of her case being made at the time:—"She still has a cough without expectoration, cannot undergo any very great exertion; for the last month has complained a good deal of pain over anterior portion of left chest, with much tenderness on pressure. This has not been relieved by blisters. Her general health is very good; has gained much flesh within two months; left side of thorax is much contracted, the shoulder falling considerably, while the right is rather bulging, giving well marked deformity to her person; no respiratory motion over left chest; no vocal fremitus except at the apex, at the inner part, anteriorly and posteriorly; perfect flatness except at the apex; right lung unusually resonant; no respiratory movement under left lung except under axillæ; the heart's apex is rather nearer the median line than normal, but strikes about the sixth intercostal space; respiration in the right lung perfectly normal." Patient now menstruated the first time for two years.

PUERPERAL FEVER SUCCESSFULLY TREATED BY THE USE OF INFUSION OF DIGITALIS AS THE ARTERIAL SEDATIVE, ALTERNATED OCCASIONALLY WITH TR. VERATRUM VIRIDE.

[Reported by ALEX. HADDEN, M.D., House Physician.]

CASE I. Eliza T.—s, aged 25, primipara, confined July 28, 1860, at 11 o'clock A.M.; labor was easy, natural, and of short duration; no complications; convalescence progressed normally till August 3. At this time she was seized with chills, followed by fever, pain in the hypogastric region, very much increased on pressure, or a long inspiration. Bowels were regular; were moved freely by a large enema on the development of the above symptoms. August 4.—Her lochia continued, but of very offensive character; tympanitis had become extreme; pulse very frequent and quick; respiration hurried; sibilant râles could be heard over the anterior portion of chest; had also a teasing short cough; vomited the characteristic matter; expression of countenance anxious; diagnosis, puerperal fever. Admitted to the fever ward August 3, 1 A.M. Pulse 108, had been reduced in frequency by several doses of tr. verat. viride; pain had been lulled to some extent by sol. morph. Respiration unaffected, very hurried; skin dry and feverish; tongue large and furred. This case was placed upon use, infus. digitalis, occasionally alternated by the tr. verat. viride, by the approval of Dr. I. E. Taylor, visiting physician.

The rules observed in these cases in the use of veratrum viride and digitalis, sulph. morph. and quinia, were those given by Dr. Fordyce Barker, of this city. We aimed to reduce the pulse no lower than 60, nor permitted it to rise above 80, without endeavoring to prevent it. Morphia was given with a view to quiet pain effectually. Sulph. quinia was given when the surface of the body was cool and moist, pulse within the above range, even if under the influence of a sedative. Dr. Barker considers the quinia, given in large doses, under the above circumstances, in puerperal fever, as not only tonic but sedative in effects. I have verified the observation in many cases treated under my charge, and have, moreover, observed that the effects are more lasting. The infus. digitalis was substituted for the verat. viride because of the certainty of its action, in my hands, in cases of a different character, and without the unpleasant consequences that attend the administration of verat. viride to the same extent. I have known the pulse to be reduced to 50 and 44 without vertigo, or vomiting, or any unpleasant results. Physical prostration is likewise a

Date and Hour.	Pulse.	Respiration.	Infus. of Digit.	Sulph. Morph.	Tr. Verat. Viride.	
Aug. 4, 11 A.M.	126			Gr. ½	Gtt. v.	Pain; tympanitis; vomiting; respiration hurried and labored; pulse quick and full; skin hot and dry; tongue large and furred; cough teasing.
Aug. 5, 1 A.M.	108			½	v.	Ordered the vagina to be syringed out every five hours with one part of Labarraque's solution to twenty of tepid water until the discharge ceased.
8 A.M.	108			½	v.	No pain; tympanitis very considerable; nausea; perspiring freely.
7 " "	104		3 i.	½	v.	
9 A.M.	96			½	½	No marked change during the last three hours; very comfortable.
12 M.	96	18	3 ss.	½	½	
1 P.M.	96	18	3 ss.	½	½	Pulse strong, wiry; thirst extreme; cough continues. Perspiring copiously.
2 " "	84	10				
3 " "	96	11	3 ss.			
5 " "	78	14				
7 " "	72	14				
10 " "	72	18				
12 " "	72	18				
Aug. 6, 1 A.M.	72	18	3 ii.			Nothing occurred during the previous six hours of importance; beef tea was administered every two or three hours; slept very comfortably; respiration easy; tympanitis not so great.
7 " "	76	18				
10½ A.M.	66					Dr. Taylor visited the patient. Has had slight rigor; pulse quick; skin hot and dry. Has severe pain in the head; ordered sweet spta. nitro 3 ss. every two hours until fever subsided.
2 P.M.	78	15		1	8	
3 " "	90	18				Respiration hurried, thoracic; skin moist; increased soreness over the abdomen.
6 P.M.	108	80		1	8	vi.
7 P.M.	96	14				
9 " "	96	14				vi.
10½ " "	108	22				
11½ " "	86	18				
Aug. 7, 8 A.M.	78	18				iii.
6½ " "	72					
8½ " "	66	90				
9½ " "	84					
11 " "	72					
12½ P.M.	84					
2½ " "	90					
4 " "	87	18	3 ss.			
7 " "	86	24				
9 " "	86	26				
10 " "	78					
11 " "	76					
Aug. 8, 2½ A.M.	76	21	3 ii.	½		iii.
5 A.M.	68	19				
6 " "	64					
8 " "	66	19				
9 " "	60					
10 " "	68					
11 " "	65					
1 P.M.	96		3 ss.	1	8	iv.
2½ P.M.	114					
3½ " "	108					
6½ " "	80		3 ii.	½		vi.
9 " "	80					
10 " "	86					
Aug. 9, 4½ A.M.	78					
						Sleeping; has no severe pain in abdomen, but sleep is not refreshing.
						Skin moist; respiration no longer noticed; morphia used only with a view to quiet pain; perspires; skin cool. Ordered—S. S. quinia (gr. x.) 3 ss. to be given at 5 A.M., and the same repeated at 9 A.M., if rigor or fever did not take place.

Date and Hour.	Pulse.	Respiration.	Infus. of Digit.	Sulph. Morph.	Tr. Verat. Viride.	
Aug. 9, 11 A.M.	73			Gr.	Gtt.	Skin cool, moist; miasmatic element suspected as a complication from the periodical return and previous history.
3 1/2 P.M.	73			×		Skin again feverish; pulse quicker; has no pain; sweet spts. nitre 3 ss. every two hours.
7 1/2 P.M.	100			×		Feverish and delirious.
10 " "	96					
12 " "	84					Pulse weak; skin moist. Ordered brandy 3 ss. in punch.
Aug. 10, 5 1/2 A.M.	73					S. S. quinia (gr. x.) 3 ss.
7 " "	80					
9 " "	86					
11 " "	56					Has no pain in any part; is bathed in perspiration.
1 P.M.	54			×		Was seized with a chill and severe pain in the right iliac region during the last hour.
6 " "				×		Skin feverish; pain still severe, extending to epigastrium.
9 P.M.	106		3 ss.	×		
Aug. 11, 3 A.M.	99				iv.	
4 " "	96				vi.	
8 1/2 " "	84					
12 1/2 " "	79					
4 P.M.	60					Pulse feeble, soft; skin cool, moist. Brandy in punch 3 ss. every two hours. S. S. quinia (gr. x.) 3 ss.
7 P.M.	66					Sleeping. Brandy discontinued as well as the beef tea and milk; the articles of diet causing sleep.
11 " "	72					Tympanitis has mostly passed away; has had a free passage from the bowels; copious secretion of urine; skin moist, and surface cool and pallid. Pain still lingered in the right iliac fossa, but not severe. At this time she was ordered emplast. vesicat. 4 by 4 over the seat of pain; denuded surface sprinkled with morph. gr. 1/2. If pain continues.
Aug. 12, 9 A.M.	66					No change in the internal remedies; no symptoms of importance have been observed; still very weak; placed on quinia and iron every six hours, gr. i. of the first, and gr. ii. of the latter. Pulse has ranged from 60 to 70 per minute; brandy continued every four hours.
Aug. 14.						Treatment mostly suspended; discharged a few weeks after entirely cured.
Aug. 17.						

symptom of overdose verat. viride. Its effects are also more lasting when produced. The administration of both in the manner above shown, was attended with pleasant results, and very little of either sedative was required to keep the pulse under control. This case was very severe, and prognosis very unfavorable at first.

JOURNALS FOR SEPTEMBER.

AMERICAN JOURNAL OF PHARMACY.—September.

ART. I. *On some points of chemical theory, on the Ammonia and Ammonium-basis, and on the National Pharmacopœia*, by FRANKLIN BACHE, M.D.—The author indulges in some curious speculations respecting the equivalent numbers, then introduces the doctrine of chemical substitution, taking ammonium as an example; and gradually withdrawing its equivalents of hydrogen, and replacing them with certain compound radicals, he follows it through a long series of substitution compounds. He also glances at the numerous contributions made by chemistry, both in a me-

dical and dietetic point of view, and also at the beautiful chemical relations subsisting between plants and animals, the vital processes of the one being the liberation, and those occurring in the other the absorption of oxygen. He then mentions the importance of organic chemistry to the medical man, and the advantages derived from a uniform national pharmacopœia. ART. II. *Iodide of Propylamine*, by BENJAMIN J. CREW.—Reports received from Europe concerning the remedial powers of propylamine and its chloride in the treatment of rheumatism, suggested to the writer that it might be used in the form of an iodide in those diseases in which iodine has hitherto been successfully employed. By the aid of heat it readily combines with iodine, forming a colorless solution, emitting the odor of each of the two substances. It is decomposed by acids. It is alkaline to test paper, but gives the acid reaction upon exposure. The following formula is suggested for its employment. R Iodide of propylamine, 25 drops; peppermint water, 6 oz.; sugar, 2 dr. Dose, a table-spoonful every two hours, the patient receiving one-sixteenth of a grain of iodine at a dose. ART. III. *Note on Fluid Extract of Wild Cherry Bark*, by WILLIAM PROCTOR, JR.—Containing the formula, with some hints in regard to manipulations of interest to the pharmacist. ART. IV. *Analysis of Milk*, by JOHN M. MAISCHE.—The author examined a specimen of milk obtained from a farmer as "pure and fresh country milk." It was found to be deficient in caseine and butter, while the lactometer showed it to be about one half water. It was free from both chalk and magnesia. ART. V. *On the Impurities of Commercial Zinc*, by CHARLES W. ELIOT and FRANK H. STORER.—The impurities were found to consist chiefly of metallic lead, and the authors believe that the other impurities found by previous observers are accidental, or occur in minute quantities. None except the specimen from New Jersey gave the slightest evidence of the presence of copper. In the specimens examined for iron the proportion of that metal rarely exceeded two-tenths of one per cent. They are of the opinion that arsenic is far less common than is generally supposed, the general opinion of its presence being due in a great measure to the impurity of sulphuric and chlorohydric acids used in the process for its detection. This opinion is founded upon experiments made with different specimens of acid upon the same metal, no deposit being obtained when the acids had been previously purified, the result being different when commercial acid was used. The purest zinc they analysed was that manufactured at the Pennsylvania and Lehigh Zinc Works, at Bethlehem, Pennsylvania. ART. VI. *Tartro-citric Lemonade (Liquor Soda Tartaras)*, by PROF. J. LAWRENCE SMITH.—This preparation is proposed by the author as a substitute for citrate of magnesia. He claims for it certain advantages over the citrate, such as being more uniform in its composition and action, less likely to undergo decomposition after the bottle is opened, more agreeable to the taste, and less costly. The following is the formula:—Sal soda, 21 lbs. 14 oz. avoirdupois; tartaric acid, 15 lbs. avoirdupois; white sugar, 24 lbs. avoirdupois; water to make 25 gallons. It is then put into strong twelve-ounce bottles, and thirty-five grains of bicarbonate of soda added to each bottle. ART. VII. *California Beer, or Yeast Plant*, by THE EDITOR.—This is thought to be identical with the common yeast plant; he calls for some information concerning its history. ART. VIII. *Hypophosphite of Quinia*, by PROF. J. LAWRENCE SMITH, of Louisville, in which the writer gives the formula, and the manner in which it is manufactured at the Louisville Chemical Works. ART. IX.—Letter to the editor on the botanical source of the Balsam of Peru, by Daniel Hanburg, F.L.S. ART. X. *On Red Precipitate Ointment*, by F. A. KEFFER.—The writer says that this ointment may be made to keep for a great length of time if prepared with the oleum ricini instead of lard. The formula is:—R Olei ricini 3 iiii; cereæ albæ 3 ss; hydr. oxid. rubri 3 ss. Melt the wax and oil with a gentle heat, and when cool rub in the red precipitate previously reduced to a fine powder.

American Medical Times.

SATURDAY, SEPTEMBER 22, 1860.

QUARANTINE: WHAT IT IS, AND WHAT IT SHOULD BE.

QUARANTINE is so often mentioned as "an institution of the Dark Ages," it might be inferred that there exists no scientific or reasonable basis for regulations in the nature of quarantine restrictions. Though state legislatures and international conventions have dignified such regulations with all the sanctions of statutory law, the fact is known and admitted that the responsibility of advising and procuring their enactment has rested primarily with the medical profession. In our own country the great names of Hosack, Francis, Bayley, Lining, Vaché, and Dickson, have successfully lent their influence in support of stringent Quarantine regulations; and in Europe the high authority of such physicians as Meade, Chisholm, Arejula, Fellows, Bally, and Pym, perpetuates a deferential regard for those Quarantine laws that were originally framed to suit the peculiar theories of those distinguished men. While at the present time it must be observed that the classical writings of Copland, Francis, and Dickson, and the firm assurance and official authority of the venerable Sir Wm. Pym, the British Superintendent-General of Quarantine, and of Dr. M'William, the Chief Physician to Her Majesty's Customs, continue in a masterly manner to support the theory of Quarantine restrictions.

But while it is admitted that medical opinion and medical names of high authority have been primarily responsible for the nature and general application of Quarantine laws in civilized countries, we have abounding evidence of the fact that in most American ports, and especially in the port of New York, all that is evil, inconsistent, or insufficient in our provisions and regulations of Quarantine, arises, not from any just interpretation of medical opinions, or from a strict application of medical facts, but mainly from the influence and agency of partisan political interests that would recklessly subsidize every department of the public service to mercenary and selfish ends. Therefore in the efforts required to secure practical improvements in our Quarantine laws it must be borne in mind that partisan and selfish interests—not medical opinions and scientific facts—oppose the reforms which commerce and the public convenience demand. Let it also be borne in mind that, practically, the vexed questions of contagion and infection, and all the nice distinctions of definition upon which "doctors differ," ought really to have little influence in determining the nature and applications of Quarantine regulations. The external sanitary regulations of cities, whether in the nature of Quarantine restrictions, or otherwise, should embrace, first, a system of *rules and means* for insuring thorough *cleanliness*, ventilation, or disinfection, in reference to every exotic source of contamination and disease; second, suitable means for insuring the proper hygienic supervision and care of every disease that might not safely be intrusted to the care of the department of internal health in each city. All well informed

physicians admit the fact that the propagating cause of any malady which is capable of being reproduced or propagated by the bodies of the sick, as in the exanthemata, or from a primary terrestrial and atmospheric infection, as in the case of yellow fever, is liable to be localized or rendered peculiarly active by certain contingent conditions which it is the proper duty of sanitary laws to prevent or remove. Thus it is conceded that both the proximate causes and the localizing or determining conditions of pestilential infection should be effectually restricted in their action, so far as such causes and conditions are subject to human control. The *external* sanitary defences necessary for this purpose, constitute the only provisions and restrictions that can ever be reasonably required in the nature of Quarantine. And no argument is needed to show that if *external* restrictions, and special provisions in the nature of Quarantine, are required for insuring the protection of the public health in commercial cities, there likewise exist still weightier reasons for correspondingly efficient *internal* regulations for the preservation of such cities from the domestic and localizing conditions of insalubrity; for there are many diseases that in themselves are not essentially contagious or necessarily communicable, which may become both infectious and epidemic by means of the localizing agency of domiciliary and municipal filth, personal uncleanness, or the mephitic air of overcrowded and unventilated ships.

A distinguished medical authority, writing sixty years ago of the system of Quarantine adapted to the Atlantic ports, justly remarked that "Quarantine should be essentially and mainly a system of *cleanliness*." Experience and observation in all maritime cities have corroborated that statement, and have at the same time demonstrated the importance of a more philosophical study and truer comprehension of the contingent and localizing conditions concerned in the propagation of infectious and transportable diseases. With the single exception of those few maladies whose propagation depends solely upon atmospheric or cosmic agencies, every specific disease is found to depend upon certain contingent conditions which are far more susceptible of analysis, definition, and control, than the proximate cause or specific virus of such diseases. For example, we are able to understand and control with great certainty the contingent conditions that are required to propagate typhus; but the exact nature of the typhus poison may for ever elude analysis, and it will always demand a vigilant surveillance from sanitary officers, so long as it is liable to meet with the contingent conditions required for its endemic propagation. It is true that there is one fearful malady, yellow fever, which may not always be readily controlled by artificial means, inasmuch as its propagation depends upon natural causes over which man can exercise but a limited control, except it be exotic: yet there is good reason to believe that thorough drainage, cleanliness, and ventilation, will eventually eradicate that pestilential scourge even from its tropical habitats. Until that desirable result is attained, some restrictions and regulations in the nature of Quarantine, against the importation of yellow fever, will be required in all ports that have a continuous summer temperature of from 75° to 90° Fahr., and which hold commercial communication with infected places, by speedy transit through regions of a similar high temperature.

As it is designed by these remarks to show what Quarantine is, and what it should be, we will at this point lay

down the following propositions as the basis of statements and suggestions we would make upon this subject:

1. The external sanitary defences of cities should provide ample means for controlling all sources of exotic infection; but, unless the public safety demands, should not exclude persons from the privileges and freedom enjoyed by citizens of such cities.

2. The principal duty of Quarantine officers should be to enforce laws relating to the cleanliness of vessels and passengers, and to control all the imported or exotic causes of infection. And the main provisions of a Quarantine establishment should be made with special reference to the speedy and thorough inspection, cleansing, and disinfection of all transportable causes of pestilential contamination.

3. The external sanitary regulations should be in perfect harmony with, and should constitute a part of the general sanitary system of the city they are designed to protect.

4. Laws and regulations in the nature of Quarantine should be so framed and administered as not *unnecessarily* to embarrass commercial transactions or restrict the liberty of persons; therefore, while State laws should determine the principles of Quarantine administration, and should also prescribe the proper prophylactic requirements at ports of departure, etc., the details of the regulations—their variation, suspension, enforcement, and special application, should be committed to a competent board of health, who should be amenable to the highest authorities of State for the proper execution of the trust.

In respect to the first of the foregoing propositions, it may justly be asserted that no existing system of Quarantine defences has provided the proper means for controlling the imported causes of infectious diseases. And none of our American cities are so utterly destitute of the essential means for controlling the actual sources of exotic infection as the port of New York, and we know of no other Quarantine system that is so liable to gross abuses and impositions. American laws relating to Quarantine mainly prescribe the detention and delay of vessels and passengers at a distant anchorage, but provide no rational or reliable means for expeditious purification. The existing regulations are burdensome to commerce. Both merchants and travellers often and justly complain that Quarantine regulations interfere unnecessarily with their rights and interests, without any adequate public advantage; while the best medical authorities declare, "that no existing system of Quarantine can be esteemed correct in theory, or as calculated to secure beneficial results in practice." But confronting this testimony, which was uttered by a disinterested committee of the National Quarantine Convention, we have the volunteered assertion of a recent incumbent of the Health Office, that "the New York Quarantine system is perfect, its laws and regulations not requiring the crossing of a *t*, or the dotting of an *i*." For the peculiar purposes to which that notorious official applied the system it was certainly too well adapted; and if its discretionary powers are not at present applied to all the ills that flesh is heir to, and to ships and cargoes that need no quarantine restraints, it is simply because Dr. GUNN is an honest health officer, and finds it as conducive to the public welfare, as it is congenial to his principles and habits of personal and professional integrity, to throw no unnecessary restrictions in the way of the commerce and travel of this port. Indeed it is now being demonstrated, at this great entrepôt of com-

merce, how safely all the restrictions of Quarantine, excepting only, those incident to faithful inspection, may be dispensed with during healthy years and cool summers. The duties of *inspection* are now performed with the greatest promptness and fidelity, but if the sickness of former years were to revisit our shipping, the health officer would find himself sorely embarrassed, and the public health would be seriously jeopardized; for typhus poison, and the pent up pestilence of yellow fever, when accumulated at the same time in scores of infected vessels, would find neither shelter nor warehouses and docks at the Quarantine station. Providence mercifully withholds the occasion for better provisions to protect from imported diseases, but true wisdom dictates the duty of providing such means for protection, as will at once guard the sanitary and the commercial interests of New York from the disasters which would inevitably result from the introduction and spread of those exotic infections to which this great entrepôt of the world's commerce is so peculiarly exposed.

For nearly four years past the State Commissioners for the Removal of the Quarantine Station have been endeavoring to find *how* and *whither* the Station is to be removed; and from the first the legislative provisions for that important commission have been just sufficient to compel them to leave the great object of their appointment unattained and untouched; while, in making temporary provisions for the sick, the State has been compelled to expend upwards of one hundred thousand dollars. But, up to the present hour, no provisions have been made for enabling the health officer to discharge his duty. There is not a dock, nor a warehouse, nor even a floating hulk, at the service of his responsible department, for enforcing cleanliness and purification. A floating hospital has done good service, and seems destined to aid in securing a radical reform of many misconceptions and abuses; but the hospital ship is available only for the care of yellow fever patients and their clothing—and for that it serves its purpose admirably.

It now appears to be plainly the duty of the Legislature to institute proper measures for providing quarantine docks and warehouses, and also for properly distributing the sick that may not be entitled to care in the Floating Hospital. But let not the former cumbrous and faulty system be re-established. The manner in which the old system terminated, and the sentiment of all classes of citizens since the conflagration of the old establishment, furnish impressive evidence that Thompsonian specifics against pestilence are not desired by the people. The demand now is for a system that will afford true protection without unnecessary restrictions, and without temptations to imposition and abuse. Science and commerce unite in this demand.

The fact having been admitted in the counsels of four successive National Conventions, that all existing systems of Quarantine are insufficient, inappropriate, and needlessly burdensome, it is to be hoped that the necessity which now demands a reformatory re-organization of the External Sanitary Defences of the principal city of the Western Continent will secure the adoption of a system that will serve as a model for other commercial cities. And let the fact be borne in mind by the medical profession, that in the present age of progress and enterprise, no system of Quarantine will be tolerated which places prohibitory or needlessly burdensome restrictions on commerce and travel. Even for protection against the importation of Yellow Fever, our profession must devise better and more certain

means than an embargo on commerce, like that which has been advocated by some of our brethren in Charleston. With deep interest we have watched the progress of the plans for improvement which have for four years been maturing in the councils of the National Sanitary and Quarantine Convention, and we now feel prepared to advocate and endorse the propositions of the final Report upon a Quarantine Code as adopted at the recent session of the Convention in Boston.

The relations of that Code and its plan of operation in connexion with the improvement of municipal sanitary government generally, as suggested in the third and fourth propositions of this article, will be considered in a future number. And in all our remarks on this subject, we desire to impress the fact, that upon the medical profession rests the responsibility of proposing and ensuring the much-needed improvement of both the External and Internal Sanitary Defences of towns and cities.

THE WEEK.

THE AMERICAN PHARMACEUTICAL ASSOCIATION, in the spirit of true lovers of science and faithful promoters of human welfare, have just closed an eventful session in this city. The members of that body have left an abiding impression of the importance and magnitude of the work that called the Association into existence; and, not least among the influences exerted by them, is that of dignified, unselfish, and ennobling fraternity between their own and the medical profession. The spirit and labors of their committees, and the elevating sentiments of such gentlemen as Messrs. Colcord, Squibb, Coggeshall, and Parrish, cannot fail to produce perennial fruits of purity, dignity, honor, philanthropy, and good will, in the important profession to which those excellent men belong. Many of the reports of committees, as well as the voluntary papers presented, are, like those of former years, full of practical interest and value. We hail the works and the spirit of this Association as an omen of a better day, when the exact value and use of the *materia medica* and pharmaceutical art will be properly and popularly understood; and when it will not be repeated from high places, that "if the whole *materia medica*, as *now used* (and *now prepared*) could be sunk to the bottom of the sea, it would be all the better for mankind, and all the worse for the fishes." While we see pharmacists thus striving to give the greatest possible purity and reliability to the *armamentarium medicorum*, it becomes us, as the skilled engineers who are to use the weapons thus skilfully forged for our use against disease, so to teach, and so to practise, as to encourage and permit only the most conservative use of drugs. It is against disease, and for the preservation of life, that legitimate medicine wages its warfare.

THE BOARD OF REGENTS of the Michigan University have just issued their Annual Report. It is principally occupied with a detail of its management during the past year; but some interesting facts relating to the medical department may be gleaned. We need scarcely state that the University of Michigan is in every respect a State institution, being governed by a Board elected by the people, and the teachers, receiving regular salaries, have no voice in its government. It has three Departments—Medicine, Law, and Science, Literature and the Arts; the total number of students being 519. In the Department of Medicine there are nine teachers and 164 students, of whom 19 were graduated. In discussing the character of the University,

and its future career, the Regents entertain the most liberal and elevated views. They say:

"As a University, our great mission is to promote the cultivation of science to the widest extent and in the most thorough manner, in all our departments. We are not to receive our standard from institutions where the pecuniary considerations involved in a large number of students determine the course of instruction. Nor in any department are we to sacrifice the interests of learning, the honor of the University, and the public good, to private considerations. In filling vacant chairs, we are to seek for the best men. In inquiring what improvements can be made, we are to keep steadily in view the real purposes for which the University has been established and endowed. Our three departments may thus be developed more and more on a genuine and solid basis; and in the end we shall reap our reward. The history of all institutions of learning, both abroad and at home, proves most conclusively this great truth, that those institutions which have drawn together the most eminent men as professors, and have pursued the most thorough methods of instruction, have acquired the widest and most enduring reputation, and have been frequented by the largest numbers.

"* * * "We have laid a fair foundation in Michigan; we have reached a development which encourages further efforts. What a distinction we should achieve if, on the wave of this public sentiment, we were to lead the way, and, first of all the institutions of our country, reach the elevation of a true University!"

We are especially gratified to find a body of laymen, controlling the destinies of a young and vigorous institution of learning, putting forward such rational opinions of the medical profession as follow:

"An illiterate clergyman, by his practical acquaintance with the simple gospel, may be a minister of mercy to the poor, and may even instruct the wise. In law, amid various grades of practice, there may be some which do not require high talent or extensive learning. But in the medical profession there are no grades that admit of ignorance and unskilfulness. No profession demands such a wide range of science and such consummate skill, and every practitioner here meets with the same cases and is subject to the same demands upon his knowledge, his art, and his experience. * * * Sciolists in medicine are more dangerous than in any other profession, for all physicians deal with the same subjects, and in their practice may invade life instead of merely affecting modes of faith and worship or endangering property."

The following just reflections upon our medical schools we cannot forbear quoting:—

"Most of the medical schools, although incorporated, are of the nature of private enterprises. Some, perhaps, are undertaken to aid the private practice of the professors. Others certainly prove very profitable in a pecuniary way. Their influence has been rather to lower than to elevate the standard of medical attainment, and to introduce into the profession, under the most honorable title of Doctor of Medicine, many ignorant and incompetent men. A low standard of professional attainment, thus created in our country, forms a formidable obstacle to all attempts to elevate the schools. . . . As yet in our country our medical schools have been very much of the same character; and the experiment remains to be fully tried of placing a school of a lofty standard in competition with the ordinary schools. Our own medical school has made some worthy improvements, and surely, as far as the experiment has gone, has no reason for discouragement."

The regular term of study in the medical department is now six months, but the Regents are already considering the propriety of following out the recommendations of the Committee on Medical Education of the American Medical Association, and extending the term to nine months.

Reviews.

TRANSACTIONS OF THE MEDICAL AND PHYSICAL SOCIETY OF BOMBAY. No IV. New Series. For the years 1857 and 1858. Bombay: 1859. pp. 313.

THE transactions of this Society form an interesting series of volumes on the diseases of India. They have also added much to our knowledge of the physical sciences of that remote region, its flora and fauna. The present number contains a large number of papers on the topography of different districts, and reports upon the diseases of the British troops at their general stations. There are also several interesting surgical papers scattered through the volume. Dr. Ballingall reports several cases of elephantiasis of the scrotum treated successfully by excision of the diseased skin; a case of perineal section, and a case of femoral aneurism successfully treated by pressure. Two reports on coup-désolil present some facts and suggestions worthy the attention of army surgeons. In one regiment, averaging 417 men, 89 cases of sunstroke occurred, of which 26 died. The causes of these attacks are thus stated by the committee of investigation:

"Excessive heat, especially if conjoined with a dry state of atmosphere; direct exposure to the sun, particularly if conjoined with laborious duties, or attended by fatigue and exhaustion caused by previous exertion; insufficient sleep or natural rest, especially if for any prolonged period, or combined with inordinate labor; duties under circumstances involving undue exposure to the sun, as for example—parades at too late an hour in the morning or at too early an hour in the afternoon. To these may be added—crowding men in tents or barracks—want of water and reasonable comforts—together with excesses of any kind—as well as any cause, mental or bodily, which tends to depress or exhaust the nervous energies of the system."

Dr. Simpson, surgeon to the regiment, gives the following detail of symptoms:

"The following symptoms were invariably present:—an intensely hot, dry skin, which lasted till even after death in those that died within twelve or sixteen hours; a sense of constriction of the chest and labored breathing, with a feeling of a heavy weight just below the ensiform cartilage. Great prostration of strength, accompanied very frequently with inability to answer questions without weeping (the strongest and most robust were not exempt from these symptoms); a tumultuous action of the heart, with strong pulsation of the carotids; pulse varied much, but was never full and hard; headache referred more particularly to the summit of the head, conjunctivæ injected, pupils acted to the stimulus of light, unless during convulsions, or during the stage of coma, when they were fixed and contracted. In several instances, however, they became suddenly dilated for a few minutes, after being fixed and contracted to a point. Countenance generally pale at the commencement, but in those cases of a severe character, or that had a fatal termination, it assumed a leaden hue; the urine was never entirely suppressed, but it passed off involuntarily drop by drop; bowels were generally costive, though several cases occurred the bowels being quite natural in every respect. There was also a great desire to sleep, so much so that if not checked at first, it passed into coma, which almost invariably terminated in death. Loud moaning during the stage of coma was also invariably present. Death either occurred from convulsions, most frequently of an epileptic character, or from coma. The symptoms, however, varied according to the severity of the attack, and the constitution or temperament of the

patient. Death sometimes occurred almost instantaneously. One man just before arriving in camp at Banda (the regiment did not arrive on the encamping ground this day, 12th May, till after noon, and the thermometer was 120° Fah. in the tents), after a march of over 20 miles, fell down in the ranks, uttered a shriek, and expired in a few minutes. A man at Koonch, before the engagement with the rebels took place, fell asleep for a short time during a halt that occurred (the sun being fully two hours above the horizon), and on being roused up answered questions with difficulty, and he had lost the use of his limbs. Others again were seized with maniacal symptoms: a man at Calpee made a rush at the Hospital Bheestie and tore the mussuck from him, and on remonstrating with him I remarked he was quite deranged in his mind. After getting some water to drink (which he swallowed in a painfully ravenous manner), and having a quantity poured over his head and body from a height, he became quiet, and shed tears abundantly. Others again smiled and laughed (unnaturally) at one time, and at another became excited and alarmed, if spoken to, and any attempt at deglutition brought on convulsions. In short, some of the cases presented symptoms of apoplexy, some of epilepsy, mania, and hysteria. The disease under consideration, when of a severe character, more closely resembles apoplexy or epilepsy (which often merges into apoplexy) than any other disease I am acquainted with. In many of the cases that came under my care, genuine epileptic convulsions ensued, lasting from six to ten minutes, with intervals of variable duration of perfect consciousness and rest. During the stage of coma the pupils were fixed and contracted, and the conjunctivæ injected, and there was loud moaning till a few minutes previous to dissolution taking place, which last symptom, however, I have never heard in pure cases of apoplexy that have come under my observation."

The post-mortem appearances showed congestions of the brain, liver, and lungs. The treatment pursued aimed to arouse the nervous system by dashing cold water over the face and chest, mustard cataplasms, stimulating enemata, brandy, ammonia, etc.

Another surgeon, J. F. Straker, reports a similar treatment as far the most successful:

"The moment a patient came in, he was stripped, and the contents of a mussuck of water poured over his head and chest, especially the latter, from as great a height as possible, great care being taken that the water did not get into the mouth, for the epiglottis was not usually in a very active state. The first effect of this was to start and rouse the patient, next to diminish the intense heat of skin, and gradually to stop the bounding arterial throb. Generally the force of the circulation was so rapidly checked, that not even the contents of one mussuck could be borne, and the douche had to be stopped; hence the necessity of a most careful observation of the pulse the whole time; the douche had to be repeated, however, very soon, for the heat and throbbing quickly recommence and spread, and would gradually recover their former pitch, if not checked from time to time. The legs were kept immersed during the same period in the hottest bearable water, and, at the earliest opportunity, fifteen grains of calomel and one or two drops of croton oil placed on the back of the tongue. In one very bad case the douche had to be kept up, uninterruptedly, for several hours, the man having been brought in late, and when I arrived to see him was quite insensible and breathing stertorously. I observed that on the first dash of the water he gave a start, but again relapsed. This I believe is a favorable prognostic symptom, for I had the satisfaction of seeing the man recover; he was ill, however, with great tendency to head symptoms for a long time."

The appendix contains reports of a number of interesting cases, among which we notice a case of successful excision of the knee-joint.

THE PRINCIPLES AND PRACTICE OF MODERN SURGERY. By ROBERT DRUITT. A new and revised American, from the eighth and improved London edition. With four hundred and thirty-two illustrations. Philadelphia: Blanchard & Lea. 1860. pp. 695.

As a handbook of practical surgery, this work has from its first issue enjoyed a remarkable popularity with the general practitioner and medical student. It embraces all the well established facts in surgical science, with concise but definite rules for their application to practice. The successive editions have been judiciously revised, and enlarged by such additional facts as scientific research has developed. The present edition contains all the more recently established principles in the practice of surgery, and as a whole presents a fair record of the present state of surgical science and art.

ON THE THEORY AND PRACTICE OF MIDWIFERY. By FLEETWOOD CHURCHILL, M.D., with additions by D. FRANCIS CONDIE, M.D. With one hundred and ninety-four illustrations. A new American, from the fourth corrected and enlarged English edition. Philadelphia: Blanchard & Lea. 1860. pp. 655.

This edition gives evidence of a searching revision by the author, and now appears as one of our most complete and reliable manuals on practical obstetrics. The work is enlarged by the addition of the author's essays on "Obstetric Morality" and "Qualifications and Duties of the Monthly Nurse."

Progress of Medical Science.

INFANTILE PATHOLOGY AND THERAPEUTICS.

By A. JACOBI, M.D.

On Spinal Infantile Paralysis (Spinale Kinderlähmung). By JACOB V. HEINE. (*Zweite Auflage. Mit 14 Tafeln.* Stuttgart, 1860. pp. 204.)—Dr. Heine's book on Spinal Infantile Paralysis ("essential paralysis") is, properly speaking, another edition of the same author's "Observations on Paralytic Affections of the Lower Extremities and their Treatment," published in 1840; but the number of cases reported, and the increase in observations and pathological investigations, is such as to justify both the change of the title, and the altered appearance of the work in general. It is but justice to the celebrated writer who is universally acknowledged as principal authority on the subject of infantile paralysis, to commence by giving his views as fully and concisely as our space will admit.

Essential or infantile paralysis runs its course in two stages, the first of which is sudden in its appearance. It has generally a very mild character, the child showing some symptoms of slight fever in the evening, and being paralysed when taken up in the morning; sometimes, however, it is more serious, the fever being high, congestion and general irritation, and symptoms of difficult dentition, being present. The child is restless, will cry in paroxysms, the eyes are half open during sleep; there is sometimes vomiting, diarrhoea, and the symptoms of rheumatic fever; in a very few cases the first symptoms of an acute exanthema, and in some even convulsions, the attacks of which will sometimes return. After this the child is quiet, fatigued, and paralysed. Paralysis mostly affects the lower extremities, sometimes an upper one at the same time;

frequently one lower extremity only, without any affection of the arms; in some cases paralysis is of so local a nature as to affect single muscles only. The urinary bladder and rectum are sometimes debilitated, but never paralysed for a longer period.

The second stage is that of paralysis. Turgor vitalis is diminished, skin and muscles are flabby. Sensation little or not at all affected. Paralysis of the trunk and arm disappears gradually, debility of the back only remaining and leading to paralytic scoliosis. If the two lower extremities are affected, one will, in the course of time, recover its mobility; sometimes only a number of muscles of the leg and foot remain paralysed, this result being probably brought on by the resorption of exudations. This partial recovery, however, will cease to go on after four or eight weeks. Then temperature, fat, and muscles diminish, the bones decrease in length and thickness. The muscles will undergo shortening, retraction setting in first in the tendo Achillis, and producing gradual contraction, and lastly deformities, in consequence of repeated attempts at locomotion. Lateral curvatures of the spinal column are frequent. The skin assumes a bluish tint; frostbites and ulcerations are the consequence of the diminished power of circulation. Bowels often move slowly and insufficiently; menstruation is not affected, and was even observed by Dr. H. in a girl twelve years old. Mental and sensory functions are never affected; the diseases of infantile age, and others too, are easily overcome: and not unfrequently patients will reach an advanced age: there is on record the case of a man who arrived at the age of forty-nine years.

The diagnosis from cerebral affection is not very difficult. Wherever there are any cerebral symptoms in the beginning, they will readily disappear in this paralysis. Contraction is never observed in the commencement, the limbs are perfectly paralytic, and paralysis takes place at the same time in all the affected parts; it has a tendency gradually to diminish, but not to progress. Both arms are never affected at the same time, nor are the arm and leg of the same side; but always either both legs, or one leg, or one arm. Affection of the trunk is not unfrequent, and produces paralytic scoliosis; in such cases the motory nerves of the lumbar and sacral plexuses of either side, and those which ascend on either side of the spinal cord, are affected. This affection is unilateral in hemiplegia. Where one arm only is paralysed (a rare occurrence), the affection has its seat in the brachial plexus of the same side; in these cases generally all the muscles are affected. Cases of transverse paralysis are very rare indeed. Sensation is hardly affected, except in the very commencement, and then, too, but slightly. There is no pain in the secondary period.

The decrease is greater than in spastic cerebral hemiplegia or paralytic kyphosis; it diminishes from the centre to the periphery, and has been observed to be as low as sixty-three and a half degrees. Motion, nervous influence, and circulation are certainly diminished, and thus the diminution of temperature is readily explained. Arteries and veins have been found smaller, and to such a degree this diminution in size and lumen may extend, that Hutin has a case in which a number of smaller bloodvessels had entirely disappeared.

The diagnosis from wasting palsy (*atrophy musculaire progressive*, Cruveilhier) is given by the fact, that in wasting palsy atrophy is the primary injury of which paralysis is the natural consequence, whereas in infantile paralysis the palsy is primary, being brought on by diminution of both nervous influence and circulation of the blood.

Deformities, in the course of infantile paralysis, do not take place except after a lapse of two or three years, and after repeated attempts at locomotion; whereas, in cerebral and spastic hemiplegia, strong contractions of the healthy muscles set in from the commencement, with subsequent deformities. These are: 1. *Pes equinus*, from contraction of the tendo Achillis; 2. *Pes varus*, from contraction of the tendo Achillis, with contemporaneous paralysis of the peronei; 3. *Pes valgus*, from contraction of the tendo

Achillis, with paralysis of the tibialis anticus and posticus; 4. Pes calcaneus, from paralysis of the tendo Achillis, etc.; 5. Contractions of the knee and hip joints, from paralysis of the extensor muscles. In the kind of pes varus alluded to, the deformity is the consequence of the paralysis of some single muscles which have lost the power of reacting on galvanic influence (always unaltered in cerebral and spastic contraction); further, the ligaments of the ankle-joint are very loose and flabby, to such an extent that the foot is very apt to turn upwards or downwards; whereas congenital pes varus never shows this abnormality. It must, however, not be forgotten that all the deformities may be found occasionally in one individual. Wherever the paralysis affects an upper extremity, it is generally complete; thus contractions and consecutive deformities are out of the question. The paralysed arm, however, is apt to increase in length from hanging downwards. Nevertheless, the arm has been found shortened by one to two inches, the lower extremity by two to six inches, the bones sharing throughout the fate of the soft parts; even the patella has been diminished in size one-third. All the epiphyses, protuberances, and the pelvis, take part in the general lack of development. This fact coincides with the experiments of Prof. Schiff, of Berne, Switzerland, showing that the bones become atrophied, in dogs, after the nerves have been cut; the ligaments become loose and flaccid.

There is a large amount of calcareous matter contained in the urine at the time when the muscles undergo a rapid process of atrophy. Dr. H. declares to have no personal knowledge of this fact, as he did not examine the urine at the proper time.

The number of cases of infantile paralysis recorded by Dr. H. amounts to 192. Of these, 158 were such as he comprehends under the name of spinal infantile paralysis. Of these were cases of Paraplegia, 37—males, 17; females, 20. Hemiplegia, 34—males, 18; females, 16. Partial paralysis, 84—males, 44; females, 40. Paralysis of one arm was observed in two cases; it was very intense, not complicated with paralysis of the lower extremities, and resisted every attempt at a cure. Paralytic lordosis was observed in one case. The etiology of infantile paralysis is best shown, in Dr. H.'s opinion, by the time in which the majority of cases occur, viz. the second and third half year. In this period the nervous system undergoes a considerable development, and therefore a great tendency to alterations readily explained. Dentition, acute and chronic exanthems, hyperæmic affections, congestion and irritation, meningitis, exudative processes, are mostly observed about this time. Frequently just such children are affected as show the most prominent symptoms of perfect health and a good constitution. The main symptoms of the first stage of the disease are fever; high temperature; tendency to fright; convulsions; dentition; and sometimes a pain along or on some part of the vertebral column. The feverish and exudative character of the malady is further shown by the fact, that a partial recovery may take place in the commencement of the trouble, which will cease to go on at a later period.

Dr. H. has seen some cases of rheumatic paralysis which could be mistaken for infantile paralysis; but they are very rare. After the paralysis has become the only symptom of the disease, viz. in the second stage, the diagnosis from cerebral affection is given by a number of secondary symptoms:—1. Entire integrity of the cerebral functions. 2. Entire absence of galvanic irritability in the paralysed limb. 3. Paralysis follows immediately on the general and local morbid symptoms of the first onset. 4. Paralysis is frequently observed in both of the lower extremities, and localized in them; hemiplegia being frequently but the remainder of paraplegia. 5. Paralysis is of a very intense nature. The subsequent curvature of the spine has a decidedly paralytic character. 6. Atrophy and decrease of temperature is more remarkable than in paralysis following on cerebral affections. Prof. Budge has found both symptoms remarkably strong in animals after he cut their spines.

7. Paralysis of one arm, which has sometimes been observed with similar symptoms, was proved by post-mortem examinations to be brought on, not by cerebral affection, but by a hyperæmic condition of the very part of the spine from which the brachial plexus takes its origin. 8. Local paralysis, with entire loss of the power of standing, has always and universally been ascribed to a disease of the spine. Infantile paralysis, as such, Dr. H. declares to be incurable. At all events, this fact would prove a great difference from paralysis excited by peripheric causes.

A merely superficial examination shows that the seat of the alteration must be deep and central. The grey substance of the spine is very hyperæmic even under normal circumstances. Thus it is no wonder that partial lesions should be frequent. A lesion of the spine as a whole is very rare; but Prof. Schiff has proved by experiments that complete paralysis may follow on the alteration of a limited part of the medullary substance. Generally a lesion of the right side of the spine will produce a paralysis of the right limb, and vice versa. Sensation may be unaffected, a circular pain being felt only in cases of mere compression of the spine by dilatation of the blood-vessels and exudation, or by diseases of the meninges. Sensation may be unaltered, without even this circular pain, in cases where the anterior lateral parts of the spine are diseased. It will be totally lost, but the function of touching kept, in diseases of the anterior parts and the whole of the grey substance. Paralysis may be partial in cases with slight and very limited affections of the spine.

As infantile paralysis has no tendency in itself to terminate fatally, there are naturally but a few post-mortem examinations on record. A very general result was atrophy of the limbs, especially of the muscles, and their degeneration into adipose, or in one case, cellular tissue. Nerves and arteries require a longer time and have less tendency to become atrophied, but they have been found so. Even the grey substance of the spine is sometimes greatly diminished in volume.

The treatment has to differ according to the stage. As to the first stage, treatment comes generally too late; wherever it is timely, antiphlogistic measures are to be resorted to. Leeches and cold applied to head and spine; flying vesicatories to the spine, particularly over the region of the brachial and lumbar plexuses; lancing of the gums, if necessary; and calomel, in the beginning in large, and later in smaller doses. In the second stage, the entire or partial recovery (the former being exceedingly rare) depends on the nature of the case: on the amount of moving power remaining; on the duration of the disease; the degree of atrophy; the age of the patient, and his perseverance in following up the requisites of a rational cure. The indications are these:—

1. To bring on resorption of the extravasation or exudation; compressing the spine; flying vesicatories, or croton oil applied locally; iodide of potassium and cod-liver oil internally; and salt baths.
2. To remove the paralysis symptomatically: Administration of nux vomica, two daily doses of one-sixteenth to one-sixth grains of strychnia (at the same time one-fourth of a grain endermatically), until electric movements of the limbs are produced, and again after these symptoms have subsided. Embrocation of alcoholic remedies; caustic ammonia; mustard; sea baths. In scrofulous individuals, sea baths, iodide of iron, cod-liver oil, nutritious diet.
3. To remove the muscular atrophy: Stimulant baths; salt baths; animal baths; frictions; gymnastic exercise; local faradization after Duchenne's method.
4. To prevent deformities or to remove contractions: Mechanical appliances for standing and walking; india rubber bandages; emollient salves; oil; apparatus for extension; Scarpa's shoe; tenotomy; supporting apparatus; kneading; frictions. Local use of electricity is of little or no use, as, in the majority of cases, no reaction at all is observed. Junod's apparatus will increase, momentarily, turgescence and temperature, without, however, having a continuous effect. The general constitution is to be supported by quinine, iron, proper diet, and baths; and several of

the remedies and appliances have to be combined, in many cases, in order to produce a sufficient, if any, effect.

The preceding pages are the short and concise abstract of the principal points contained in the valuable work of Dr. von Heine. We dare say that the author, who has always been considered as the first authority on his subject, has by this work done justice and added to his reputation; nevertheless we feel bound, while admiring his industry, knowledge, and talent, to make some remarks concerning some single statements made by him. First, we think his manner of ascribing to dentition so much power in producing spinal infantile paralysis, as somewhat antiquated; nor do we any more agree with his recommendation of those old foggy animal baths, which have no other preference to any other means of applying warmth except greatly more inconvenient. Further, in our opinion the author limits his subject a little too much. If he had written on those incurable cases of infantile paralysis which are produced by "spinal diseases," he could not have been more rigorous in excluding both those cases which are the consequences of the same pathological process in some other place, say in the medulla oblongata, and their curability. We do not see why the spinal paralysis alone should bear the name and represent the infantile paralysis, the less as the process of resorption of exudations and apoplexies at other places takes the same course as in those cases described by the author. We have but lately observed the case of a child four years old, whose disease set in with convulsions and was followed by squinting, and paralysis of the right arm and leg. This case would be excluded by Dr. Heine, as he appears to have made up his mind that henceforth and for ever, no case shall be named infantile paralysis except such as has its seat in or about the spine. We see no reason why this should be so, the less as the literature on this very subject is young, and a dangerously false step ought to, and still can, be avoided. Whatever the name may be, however, our readers see, that, really, the diagnosis of each case ought to be made separately. Infantile paralysis, "essential paralysis," etc., etc., are just as little the diagnostic names for material alterations, and justified in being classified among diseases, as "paralysis" simple, which is no disease, but a symptom, an altered function of a diseased organ. In future times the diagnosis of "infantile paralysis" will be either hyperæmia, or exudation, or extravasation, etc., etc., of the meninges of the spine, or oblongata, or cerebrum, etc., etc. We shall be enabled to make the more exact anatomical diagnoses the more physiology will have done in explaining the functions of the minute parts of the nervous centres. Great progress has already been made, at all events enough to enable us to get rid of diagnoses of no meaning and no physiological foundation.

As to the curability of the disease, we do not fully agree with the author's views, although our indications and therapeutics have been no others but those given by him from the first to the last. Dr. Heine sees his patients in his institution; patients from every part of the country, of every age, etc., who, at last, after having neglected their case for years, or after having been attended for years, and proved incurable in the hands of their physicians, go to implore the help of a distant specialist. Thus the author is apt to see unfavorable cases only, whereas the average number of cases under the observation of general practitioners is greatly more favorable in regard to the final result. In the course of six or eight months, or a year, we have generally seen, in proportionately fresh cases, either complete recovery, or such a progress in the general state of health, that we sometimes lost sight of the children, being unable afterwards to learn whether in the course of time, and on continuation of the same treatment, the symptoms of paralysis were entirely removed or not. We add these remarks, without detracting from the truth of those made by Dr. Heine on his cases, for the purpose of showing the difference in the severity of cases, and encouraging continued endeavors to restore the lost health.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON SURGERY.

DR. JAMES R. WOOD, President.

RESECTION OF JOINTS.

EXSECTION OF KNEE-JOINT.—RECOVERY. BY DR. JAMES R. WOOD.

(Continued from page 195.)

JULIA LALEY, æt. 30, Ireland, single, domestic, strumous constitution, admitted to Bellevue Hospital, October 22, 1859, with synovitis of the left knee-joint. About six weeks before admission patient fell on the sidewalk, striking her left knee; the joint became soon very much inflamed and swollen from the presence of effusion into its cavity. The pain at the time was intense. Leeches and wet cups were applied to the affected part, and the inflammation gradually subsided, leaving the joint very much disorganized. The condyles of the femur being very much expanded, and bony crepitus being distinctly felt on moving the joint, the operation of resection was determined upon. February 4, 1860, patient being etherized, I made a semilunar incision from the condyles of femur to head of tibia. The flap was carefully dissected back; the crucial ligaments were then divided, the leg flexed upon the thigh, a retractor placed over the post. cul de sac, and the condyles of the femur, with the head of the tibia, were then sawn off. The patella, being very much diseased, was also removed, together with the ligamentum patellæ and the fibrous tissue around it. The superior internal articular artery was the only vessel tied. The bones were then brought together by annealed wire sutures, one being placed at the outer angle, and the other at the inner. The edges of the wound were secured by four silver sutures. The limb was placed in a fenestrated tin splint, with the foot elevated. The patient did very well, and the second day after the operation the wound was found to have united by first intention, except at its angles. March 8.—Wire removed. March 31.—Limb removed from tin splint, and a gutta percha one applied instead, when the patient was allowed to get up and walk about the ward with crutches. The patient was exhibited to the Section, and at that time only a small sinus was left at the superior portion of the knee. This opening has since entirely closed, and the patient is entirely well, with a firm union of the femur and tibia.

FIVE CASES OF EXSECTION OF ELBOW-JOINT. By Dr. JAMES R. WOOD.

Case 1.—Alex. Curry, æt. 23, Ireland, carpenter, of strumous constitution, was admitted to Bellevue Hospital, November 18, 1859, with strumous disease of left elbow, and caries of the articulating surfaces of the bones, entering into the composition of the joint. Patient has never been ill until about three years ago, when he was struck with a hammer upon the joint, causing swelling of the part, to which at first he paid but little attention. About the 1st of March, 1859, the arm began to feel numb, and he lost all power of motion of the limb. Acute inflammation shortly afterwards set up in the joint, and about the 14th of June several abscesses formed in the vicinity, which were freely laid open. At date of admission the joint was very far advanced in disease; there were three sinuses communicating with it, and the articulating surfaces of the bones were found to be in a carious condition. November 21, patient being in a good condition, and being placed under the influence of ether, I excised the joint, by making a letter H incision, carefully separating the triceps from its insertion into the olecranon process, leaving the periosteum as far as it was practicable, and dissecting the flaps back. The olecranon was then cut off with Liston's forceps, and the ulnar nerve

enucleated from the notch behind the inner condyle. The extensor and flexor muscles of the fore-arm were then separated from their origins, and the condyles of the humerus sawn off. Upon further examination the head of the radius was found to be diseased, and was in like manner removed. No vessels were tied. The edges of the wound were then brought together by sutures and adhesive straps, and the limb placed upon a hair cushion. On the 23d of November the edges of the wound had healed by first intention, except a small portion on the posterior surface of the joint. December 3.—Free suppuration was established within the joint; several sinuses had formed, which were freely laid open. December 7.—Pulse 112, elbow very much inflamed; poultice applied, and half an ounce of brandy given every hour with a sufficient quantity of beef tea. December 21.—Pulse 96, and weak; hands clammy; tongue moist; swelling in elbow subsiding; granulation of the sinuses assuming a more florid and healthy aspect. In the course of the following week the inflammation subsided, and the wound took on a healthy action. Bals. Peru was applied instead of the poultice. January 20.—Considerable fibrinous effusion showed itself around the joint, giving it a distorted appearance, and four small sinuses remained. A many-tailed bandage was applied around the limb, and the whole placed in an angular splint. Passive motion was daily made use of. February 20.—The splint was removed, and the patient directed to hold his arm in a sling. Two small sinuses remained, which discharged a fluid resembling synovia. The exudation around the elbow soon after rapidly disappeared. This patient was also presented, and it was found that he could straighten out the limb with ease, and also bring his hand to his mouth. A sinus communicating with a necrosed portion of the humerus was all that was left.

Case 2.—Josiah Rudd, 18 years, New York, of decided strumous constitution, was admitted to the Hospital Nov. 17, 1859, with morbus coxarius of right femur, which had been cured by ankylosis. The left elbow-joint was involved in extensive carious disease, and could be explored through numerous fistulous openings. After admission he rapidly improved upon a tonic course of treatment. On the 8th of January I resected the joint, adopting the H incision. The wound healed rapidly, and for the most part by the first intention. Passive motion was resorted to at the expiration of two weeks, and on the 30th of March the patient was discharged with the wound entirely closed; there was a very considerable power of flexion and extension of the joint, with some rotation.

Case 3.—William Thompson, æt. 10 years, of strumous diathesis, applied to me on the 20th April, 1852, with a disease of the right elbow joint. He was placed under tonic treatment, and sent to the sea-shore, returning in about a month very much improved. An H incision was made dividing the olecranon with Liston's forceps, then the triceps was separated from the olecranon, and in so doing as much of the periosteum was saved as was possible in order that new bone might be deposited. (These expectations were in a measure realized.) The ulnar nerve was then enucleated, then the condyles of the humerus were carefully sawn off, and in like manner the head of the radius and ulna. The parts were brought together by sutures and adhesive straps, and not a single artery was ligated. The lower angles were left open by the introduction of a tent, and the limb was placed upon a hair cushion. The wound healed kindly, and in the course of a fortnight there was but one small sinus remaining from which there was a thin discharge of pseudo-synovia. Passive motion was resorted to with great care, and in the course of two months afterwards, the motion of the joint was so much improved, that the patient could nearly straighten the limb; at the same time, he could without any difficulty seize hold of his nose with his thumb and forefinger. He could also lift with ease a pail containing a gallon of water.

Case 4.—Patrick Hughes, 14 years of age, strumous habit, applied to me for disease of the elbow joint on the

sixth of June, 1856. The tonic course of treatment was pursued, and in the course of a few weeks he was in a fit condition to resect the joint. I performed the operation in the same manner as already stated by the H incision. The wound united by first intention except at the point of suture, and at the situation of the tent. The discharge was free for a time, but in the course of three weeks it healed entirely. Passive motion was then carefully practised, and the patient was discharged cured seven weeks after the operation, with very free motion of the joint.

Case 5.—Thomas Jones, æt. 40, a native of N. Y., and a stone cutter by trade, applied to me for treatment on the 20th of April, 1859, with extensive disease of the elbow joint. I proposed amputation, to which he objected, and then after explaining to him the operation for resection, he readily consented, having previously understood, that the operation was, under the circumstances, liable to be attended with no benefit; in which case amputation could be resorted to afterwards. I resected the joint by the H incision. The patient did very well for something like a fortnight, when the disease of the soft parts, which was very extensive, assumed a very formidable character. I then proposed amputation, which he readily consented to, and recovered.

In conclusion, Dr. Wood stated that he had found the performance of the operation much facilitated, when Liston's forceps was used. He did not see the necessity of exposing the ulnar nerve, and maintained that it should never be done.

EXSECTION OF THE ELBOW-JOINT. BY DR. STEPHEN SMITH.

CATHARINE KEARNS, 30 years of age, single, domestic, good constitution, was admitted to the surgical wards of Bellevue Hospital, Dec. 9, 1856, for injury to the elbow. About four years before she fell upon the right elbow, causing considerable soreness and severe pain in the joint. Inflammation followed, and she showed the elbow to a physician, who lanced it, three weeks after the injury. From this time it continued suppurating till eighteen months since, when, a small piece of bone being removed, the discharge ceased. The joint now became stiff. Suppuration commenced about six months ago a second time, and last summer it was so painful that she was obliged to abandon her work entirely.

On admission the joint was ankylosed, and the arm nearly in the straight position. It was determined to break up the ankylosis, and establish passive motion. Accordingly the patient was placed under the influence of an anæsthetic, and the ankylosis was readily overcome. The arm was nicely adjusted in a splint, with which it was intended to keep up passive motion, but the joint and adjacent parts became so much inflamed that it was necessary to remove all dressings, and use evaporating lotions and poultices. The arm again gradually assumed the extended position, sinuses formed, which communicated with dead bone both above and below the joint, while the elbow assumed that peculiar fusiform shape, indicative of disease of the articulation. Still no crepitus could be obtained on moving the joint surfaces. Patient was allowed an extra diet, and the medical treatment was tonic, and varied to meet the various indications of the case. A consultation approved of an explorative operation and of exsection of the joint, should the amount of disease exposed in the course of the operation justify it.

The operation was performed on the 27th of May, 1857. A crucial incision was made on the posterior part of the elbow, and the integument laid back in four flaps, exposing the olecranon process. This was found to be diseased, and was removed with the forceps. The joint was now examined and found also in a carious condition, rendering exsection of the joint imperative. The dissection was carefully continued, the condyles of the humerus were then removed by the chain-saw, and afterwards the head of the radius and the upper portion of the ulna on a line parallel with it. The ulnar nerve was not seen during the operation. The wound was dressed by turning back the four

flaps of the integument and uniting them with sutures. There was no pain or numbness complained of in the fingers after the operation.

Fourth day.—Wound united through whole extent by first intention, except at the joint, which has been kept open to allow the discharge; pulse 98, full and soft. Patient can nearly close her hand, and has good use of her little and ring finger, and no numbness—showing that the ulnar nerve has not been injured during the operation; discharge but slight, and the erythema subsiding; some little discharge from the old openings which had communicated with the dead bone.

June 2.—Very little inflammation around wound, and very little discharge from it; syringed out with the Labarraque and water, and kept in the sling. *Sixth day.*—Continues doing well, sleeps well; anodyne of morphine is still given at night, as patient has been in the habit of taking more or less opium to quiet pain. Patient has better use of the forearm than before the operation; discharge from it is now less than $\frac{3}{4}$ i. in the twenty-four hours; dressed daily.

Eighth day.—General health good; discharge still continues from elbow; no inflammatory swelling about it; discharge about $\frac{3}{4}$ i.

Twelfth day.—The effusion which had surrounded the joint, giving the elbow a distorted appearance, has been nearly absorbed. The elbow is reduced to its normal size, and the wound united.

This patient returned to service, and so perfectly did the new articulation answer its purpose that it was for a long time unknown to the family which she entered that she had any imperfection in her arm.

Correspondence.

FOREIGN CORRESPONDENCE.

Letter from DAVID P. SMITH, M.D.

EDINBURGH.

AUGUST 13, 1880.

TO-DAY Professor Syme removed an adipose sarcoma hanging from the posterior margin of the axilla. It was very large; incision being required of fifteen inches extent. Chloroform is here given very freely on a napkin, loosely applied to the patient's face. In reply to a question, of mine, Prof. Syme said he had never seen a fatal case from chloroform, and that he thought all danger incurred in its use arose from bad management. In closing the wound he used silver sutures, which he remarked he owed America for. An epithelial cancer of the lower lip was removed by an oval incision with scissors instead of our ordinary V-shaped incision, care being taken to unite by suture the skin with the mucous membrane. I was surprised to find that immediately after the operation, although there was considerable loss of tissue, he was able to completely close his lips. I am not sure but that it gives less deformity than the V-shaped incision.

August 14.—Prof. S., after dissecting up the scrotal integuments and joining them with silver sutures over a fungus of the testicle, remarked that he considered it to be a mercurial disease. That in certain systems the use of mercury, which might indeed cure the symptoms for which it was used, in the end produced just this state of things. A child of six months was brought forwards to be operated upon for hare-lip. Prof. S. remarked that he did not usually operate upon infants of so tender an age, but that in the present instance the deformity was so great that he considered an early operation very desirable. He first caught the two depending angles of the cleft and the upper lip each with a pair of spring forceps. Letting them hang down by their own weight, the paring of the edges was

rendered easier of accomplishment. A piece of wet lint was put upon the cut surfaces, and the child taken away so that the bleeding might cease before the edges were approximated. After the performance of another operation, say in about twenty minutes, the lint was removed, and one hare-lip pin being introduced just above the margin of the lip, the edges were further approximated by the silver suture. A curious case of varicose aneurism was shown which occupied the whole side of the head beneath the ear, projecting into the mouth, under the jaw. Before entrance to the hospital it had been several times punctured through the mouth with needles. Nothing but blood had issued. It was found to be easily compressed, and pervaded by a strong aneurismal thrill plainly perceptible to the hand. This thrill was most plainly felt over the external jugular vein. Pressure on the carotid exercised no influence over it. Prof. S. declined doing anything for it. A girl was shown with an exostosis of the head of the fibula of great size. Prof. S. considered any attempt at its removal as so dangerous on account of the almost certainty of opening the knee joint, that he could advise nothing short of amputation. I now remember to have seen somewhere recently reported, the case of a gentleman upon whom Mr. Liston operated for the removal of a similar but much smaller growth. The man died.

August 15.—To-day Mr. Spence removed a urinary calculus from a boy about fourteen years old by the ordinary lateral operation. The stone was one and three-quarter inches long, by one and a quarter and one inch in short diameters. I have seen in the private practice of Mr. Edwards some very interesting cases of exsection of the joints. One case in particular deserves notice. It is the removal of all the carpal bones for strumous disease. Although but a short time has elapsed since the operation the patient, a girl of 12 or 14 years, can sew very well with it, and grasp so small an object as your finger with almost unimpaired prehension. Assuredly excision of the wrist joint will yet be preferred to amputation.

August 21.—Prof. Syme operated for removal of false joint of humerus about five inches above elbow joint. When a case is admitted into the Infirmary, he orders a firm case to be made for the arm of starch and pasteboard, keeping the elbow at a right angle. When this case, which extends from the top of the shoulder to the ends of the fingers, becomes dry, it is removed, an incision made down to the ends of the bone, the fractured ends cut off, and then the arm replaced in this firm case. The wound is easily reached and dressed through a window cut in the case, and this splint is retained upon the arm for a long time.

In the case before us, the arm had been fractured fourteen weeks previous, and there had apparently been no attempt at union. The ends of the bone, not being easily turned out, were removed by cutting forceps. I am of the opinion that the views of Prof. F. H. Hamilton with regard to the cause of this complication of fracture, are correct. Cases occurring in my own practice have shown me the almost impossibility of securing immobility of the upper arm while the elbow joint is flexed. The eminently philosophical suggestion of Professor Hamilton deserves extensive trial.

A few days ago I enjoyed the hospitalities of Prof. Simpson, and saw at his house Dr. Olliep of Lyons, who showed us the results of many experiments he had made upon rabbits, to demonstrate that periosteum is the sole producer of bone. He also showed that periosteum transplanted into different parts of the body of the rabbit would produce bone. I believe it has been noticed in the practice of Dr. Jas. R. Wood of New York, that when his plan of introducing and moving a probe around a sequestrum formed after an amputation has been followed, a large amount of bony matter has been thrown out. Taking, then, these two facts together: 1st. That periosteum produces bone; 2d. That irritation of periosteum by even a probe causes it to throw out a large amount of bony matter; does it not seem that measures unnecessarily severe have been adopted for the cure of false

joint? Why not make a simple incision down to the lesion, and cutting through the periosteum, irritate it at the time of the first incision and every few days thereafter, by introducing a probe underneath it? If subcutaneous incisions of the periosteum, instead of through the bones, be made, I think much more will be accomplished.

August 22.—Mr. Spence showed a case of acute periostitis of the upper part of the humerus. On dilating the fistula leading to it, and introducing the finger, it was found that new bone was forming around the sequestrum. This sequestrum being removed, recovery will, no doubt, be rapid. What a pity that early incision through the soft parts down to the bone, and, if need be, trephining the bone, is not had recourse to early in these cases. Prompt recovery always follows such an operation. A case of mine recently reported in this journal exemplifies this treatment. The stone case recently operated on by this distinguished surgeon is nearly well.

August 31.—A few days ago a man was admitted into the Infirmary laboring under retention of urine. He was relieved for the time, but one night by some turn or other the catheter was broken, the curved extremity remaining in the bladder. The next day Mr. Syme, after endeavoring ineffectually to seize the end of the fragment of the catheter by urethral forceps, cut in the mesial line upon a staff, but on introducing his finger could not, in any way, reach the bladder. A few days after an autopsy showed the existence of an immense tumor beneath the prostate filling up the pelvis to that degree that it was quite impossible to reach the bladder from the perineum. A very anomalous case. I saw Mr. Syme amputate the thigh of a young girl for fungus hemothodes of the knee joint, and was much pleased by the simplicity and beauty, if such a term can be applied to such a subject, of the operation. The artery was compressed in the groin by the thumb, and anterior and posterior flaps formed by transfixion. The blood lost was certainly not more than three ounces. A male child, twenty-one months old, was brought to the Infirmary, upon whom lithotomy had been done several months previously by a surgeon in the country. Ever since the operation the urine had passed wholly by the wound, which had become fistulous, and on introducing bougies into the urethra it was found impervious. Mr. Syme introduced a director through the fistula into the bladder, and then, cutting upon that until a staff, introduced through the urethra, could be brought into contact with the director in the fistulous passage, in this way endeavored to re-establish the urethra. It seemed to have been entirely obliterated, as was suspected, by improper bruising or cutting at the time of the lithotomy operation. Time will show us whether any operation is likely to be of any avail. I have seen and assisted, in private practice, in the division of tendons for cure of club feet several times, and have been particularly struck by the strong adhesions that repeated operations have caused to form between the tendon and surrounding parts. I apprehend that a cure should, if possible, be obtained by one division and the use of proper shoes afterwards, for the adhesions add very much to the difficulty of a cure. They will not readily yield.

PHOSPHORUS IN PLANTS.—M. B. Corenwinder read lately before the French Academy of Sciences a *résumé* of his studies on this subject. Young plants give ashes rich in phosphoric acid; but after maturity the grain, or fruit, stalks, or leaves contain but a small proportion. Phosphoric acid in plants is found in close combination with nitrogenous matters. The organs of the plant destitute of nitrogen and not required for its alimentation are also destitute of phosphates; but the pollen of flowers and the spores of cryptogamia contain a considerable portion of phosphoric acid. Marine plants growing on rocks also contain much phosphate.—*Lancet*.

Medical News.

ARMY MEDICAL INTELLIGENCE.

GETTY.—Assistant-Surgeon Getty, of the Medical Staff, will accompany Major Shepherd to Texas, and report by letter to the Surgeon-General, and await further orders.

COVEY.—Assistant-Surgeon Covey is attached to Major Lynde's command, and will be stationed near the Mimbres.

RYLAND.—Assistant-Surgeon Kirtley Ryland is assigned to duty with the troops near the mines of Arizona.

NORRIS.—Assistant-Surgeon Basil Norris is stationed at Fort Craig, N.M.

BAILY.—Assistant-Surgeon E. I. Baily, of the Medical Corps, is relieved from duty with the expedition against the Comanches and Kioways, and will resume his station at Fort Brown. His place in the expedition is to be filled by Assistant-Surgeon I. C. Baily, who will report to Col. Porter for duty.

CLEMENTS.—Assistant-Surgeon Clements is assigned to duty at Fort Fauntleroy.

SATTERLEE.—Surgeon R. S. Satterlee is relieved from duty in the Medical Board to assemble in Baltimore on the 20th inst., and Surgeon Jarvis is detailed in his stead.

SIMONS.—Surgeon Simons, of the Medical Department, is assigned to duty at Fort Moultrie.

APPOINTMENTS.

PENNSYLVANIA MEDICAL COLLEGE.—WM. B. ATKINSON, M.D., Assistant Professor of Obstetrics and Diseases of Women.

LOUISVILLE MARINE HOSPITAL.—W. H. DOANE, M.D., Superintendent.

MICHIGAN UNIVERSITY.—At a meeting of the Regents, held at Detroit, Sept. 14, the following resolutions were passed:—

"Resolved, That Professor A. B. Palmer be appointed Professor of the Theory and Practice of Medicine, of Pathology, and of Materia Medica, with a salary of one thousand dollars.

"Resolved, That Professor Moses Gunn be appointed Professor of Surgery and Therapeutics, with the same salary.

"Resolved, That Professor Abram Sager be appointed Professor of Obstetrics and Diseases of Women and Children, with the same salary.

"Resolved, That Professor Corydon L. Ford be appointed Professor of Anatomy and Physiology, with the same salary.

"Resolved, That the Professors named in the four preceding resolutions may make such material exchange or distribution of the duties above assigned as in their judgment shall be best for the interests of the University, and of the students who may attend the medical lectures.

DEATHS.

DEATH OF SURGEON BYRNE.—Surgeon Bernard M. Byrne, of the United States Army Medical Staff, and for three years Attending Physician at the Fort Moultrie Station on Sullivan's Island, died at that place, a few days ago, of typhoid fever. He was a native of Ireland, but came to this country at an early age, and graduated with distinction at the University of Maryland. After completing his medical course, he was appointed Assistant Surgeon in the United States Army, and stationed at Fort Monroe on the 20th of May, 1836, under Col. J. L. Gardner, who is now in command at Fort Moultrie. In Mexico he was Medical Director for his department of the army. He was in the battles of Palo Alto, Resaca de la Palma, Monterey, Saltillo, and Buena Vista. He bore Ringgold from the field when he was fatally wounded. Dr. Byrne's name frequently received honorable mention from Generals Taylor, Wool, and other officers to whose division he was attached. As a writer, Dr. Byrne was peculiarly gifted. While quite

a young man, he published, in 1833, a work entitled "An Essay to Prove the Contagious Character of Malignant Cholera." This production had peculiar merits, and written in a clear, vigorous style, was read by many, and very much liked. After the lapse of twenty-two years, in 1855, Dr. Byrne brought out a second edition, giving additional facts and notes. The book can be occasionally obtained, and is well worthy the perusal of the thinking, reading men of our profession.

DENTON.—On Aug. 17, SAMUEL DENTON, M.D., Professor of the Theory and Practice of Medicine in the University of Michigan, at Ann Arbor, Mich.

HAMPTON.—At Brighton, N. J., ISAAC H. HAMPTON, M.D.

ERRATA.—Page 181, third paragraph, line 30, second column, for "vermilion line," read vermilion hue. Same page and paragraph, fifth line from the close, for "offering thus in public," read appearing thus in public.

Page 183, line seventeen from top of page, first column, for "the outer and pulmonic artery," read aorta and pulmonic artery. The same error occurs below on the same page. Same page, second column, line second from top, for "roughness is a distinctive characteristic," read want of roughness. Same page, second paragraph, line three, for "was just suggested," read was first suggested.

Page 185, second column, last line of page, for "Mere charities," read These charities.

PROF. DRAPER of the University Medical College has returned from his foreign tour; Prof. METCALFE, of the same faculty, is daily expected.

ATLANTA MEDICAL AND SURGICAL JOURNAL.—With the commencement of the sixth volume Drs. JOHN P. LOGAN and W. F. WESTMORELAND retire from its editorship, and Dr. J. G. WESTMORELAND becomes sole editor and proprietor.

THE PHILADELPHIA HOSPITAL has opened its wards for clinical instruction free of charge to the students.

It is stated, on the authority of the *Philadelphia Reporter*, that that journal "has become the leading medical periodical of America"!!

THE EASTERN DISPENSARY has removed to the new rooms in the east end of the second story of the Market Building, No. 57 Essex Street, corner of Grand. On account of the unfinished state of the apartments, the treatment of patients able to walk to the office must be discontinued for the present, but the sick at their houses will be attended as usual by the visiting physicians. The house physician will be at the rooms daily, from 8 A.M. to 3 P.M., for vaccination, and for supplying vaccine lymph, also for the treatment of serious injuries, and such urgent cases of disease as may be presented, sending patients to the hospital, &c.

A VERDICT FOR \$2,500 DAMAGES FOR MALPRACTICE.—A suit for Malpractice was prosecuted in the court of common pleas of this county at the last term by a young man who was the subject of an oblique fracture of the middle third of the femur. He alleged unskillfulness of his physician, and produced his limb in testimony, which was much shortened, the ends of the bones having united so as to form an obtuse angle; we did not examine the case or hear all the testimony, but we were amused at the surgical erudition displayed by the attorneys in examining witnesses and making their argument. They as usual presumed to know everything, and assumed that the physicians knew nothing. In many respects these are very unfortunate cases for the profession. In other respects they may benefit us. Suits for malpractice should warn every physician never to promise a perfect cure, as was alleged the physician promised, and re-assured the patient of, in this case, and it should also teach physicians not to permit jealousy or imaginary self-interest or any other motive to prevent a consultation in any case of grave fracture. He should remember there was wisdom and safety in consultation. Such cases may do the profession a greater benefit by reminding the empiric that his ill-gotten gains may, in an hour when he least expects it, be resorted to, at least, by one of his dupes.—*St. Joseph Med. and Surg. Jour.*

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 8th day of September to the 15th day of September, 1890.

Deaths.—Men, 91; women, 76; boys, 168; girls, 139—total, 474. Adults, 167; youths, 15; children, 299; males, 250; females, 215; colored, 8. Infants under two years of age, 224. Among the causes of death we notice:—cholera-infantum, 66; congestion of brain, 9; infantile convulsions, 27; croup, 6; diarrhoea, 20; dysentery, 7; scarlet fever, 22; typhus and typhoid fevers, 8; inflammation of brain, 16; of bowels, 4; of lungs, 26; small-pox, 6; consumption, 50; dropsy of head, 10; infantile-maraasmus, 41; old age, 18. Classification:—brain and nervous system, 85; respiratory, 112; digestive, 159.

SEPT.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10	In.
9th.	29.87	.11	55	50	68	9	12	N. E.	5	74
10th.	29.91	.08	57	48	66	9	13	W.	2	
11th.	29.87	.18	58	52	67	9	13	S. W.	10	20
12th.	29.80	.10	59	46	58	8	12	N. W.	6	
13th.	30.08	.29	59	51	68	10	15	N. W.	8	
14th.	30.22	.17	62	54	70	10	11	W.	9	
15th.	30.20	.06	69	68	80	6	10	S.	05	

MEDICAL DIARY OF THE WEEK.

Monday, Sept. 24.	CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M.
	BELLEVUE, Obstetrics, Dr. Barker, half-past 1 P.M.
	EYE INFIRMARY, Diseases of Eye, 12 M.
	COLL. PHYS. & SURG.—Prof. Parker Surgical Clinic, 11 A.M.
	UNIV. MED. COLL.—Dr. Thomas, Medicine, 11 A.M.
Tuesday, Sept. 25.	" " Dr. Aylett, Physiology, 12 M.
	" " Prof. Bedford's Clinique, 2½ P.M.
	N. Y. MED. COLL.—Prof. Raphael, Surg. Clinic, 11 A.M.
	" " Prof. Reese, Hygiene, 12 M.
	" " Prof. Bronson, Visceral Anat., 3 P.M.
Wednesday, Sept. 26.	CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M.
	EYE INFIRMARY, Diseases of Ear, 12 M.
	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
	BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M.
	COLL. PHYS. & SURG.—Prof. St. John, Meteorology, 10 A.M.
Thursday, Sept. 27.	" " Dr. Conant, Anat. of Brain, 11 A.M.
	" " Prof. Watts, Org. Spec. Sense, 12 M.
	UNIV. MED. COLL.—Prof. Draper, Poisons, 11 A.M.
	" " Dr. Gouley, Micros. Anat., 12 M.
	N. Y. MED. COLL.—Prof. Raphael, Venereal Dis., 11 A.M.
Friday, Sept. 28.	" " Prof. Carnochan, Amputations, 12 M.
	" " Prof. Jacob, Children's Clinic, 3 P.M.
	EYE INFIRMARY, Operations, 12 M.
	CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M.
	BELLEVUE, Surgery, Dr. Meir, half-past 1 P.M.
Saturday, Sept. 29.	PATHOLOGICAL SOCIETY, 8 P.M.
	COLL. PHYS. & SURG.—Prof. St. John, Meteorology, 10 A.M.
	" " Prof. Gilman, 11 A.M.
	" " Prof. Watts, Org. Special Sense, 12 M.
	" " Dr. Detmold, Surg. Clinic, 2½ P.M.
	UNIV. MED. COLL.—Dr. Donaghy, Vener. Disease, 11 A.M.
	" " Dr. Aylett, Physiology, 12 M.
	" " Dr. Thomas, Med. Clinic, 2½ P.M.
	" " Prof. Van Buren, Clin. Dis. Fem., 11 A.M.
	N. Y. MED. COLL.—Prof. Gardner, Clin. Dis. Fem., 11 A.M.
	" " Prof. Jacob, Dentition, 12 M.
	" " Prof. Doremus, Endosmosis, 3 P.M.
	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
	CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M.
	BELLEVUE, Medicine, Dr. Thomas, 12 M.
	UNIV. MED. COLL.—Prof. Draper, Poisons, 11 A.M.
	" " Dr. Gouley, Micros. Anat., 12 M.
	COLL. PHYS. & SURG.—Prof. Clark, Med. Clinic, 11 A.M.
	" " Dr. Bumstead, Venereal, 12 M.
	N. Y. MED. COLL.—Prof. Budd, Oper. Midwif., 11 A.M.
	" " Prof. Carnochan, Surg. Clinic, 12 M.
	" " Prof. Raphael, Venereal, 3 P.M.
	CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M.
	EYE INFIRMARY, Diseases of Eye, 12 M.
	COLL. PHYS. & SURG.—Prof. St. John, Meteorology, 10 A.M.
	" " Prof. Gilman, 11 A.M.
	" " Prof. Watts, Org. Special Sense, 12 M.
	UNIV. MED. COLL.—Dr. Thomas, Medicine, 11 A.M.
	" " Dr. Gouley, Micros. Anat., 12 M.
	N. Y. MED. COLL.—Prof. Bronson, Visceral Anat., 11 A.M.
	" " Prof. Gardner, Dis. of Breast, 12 M.
	" " Prof. Jacob, Children's Clinic, 3 P.M.
	BELLEVUE, Surgery, Dr. Mott, half-past 1 P.M.
	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
	CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M.
	EYE INFIRMARY, Diseases of Ear, 12 M.
	COLL. PHYS. & SURG.—Prof. St. John, Meteorology, 10 A.M.
	" " Dr. Conant, Anat. Brain, 11 A.M.
	" " Dr. Bumstead, Venereal, 12 M.
	UNIV. MED. COLL.—Dr. Thomas, Medicine, 11 A.M.
	" " Dr. Gouley, Micros. Anat., 12 M.
	N. Y. MED. COLL.—Prof. Reese, Medical Clinic, 11 A.M.
	" " Prof. Carnochan, Clin. Dis., 3 P.M.

Original Lectures.

LECTURE ON PARTURIENT HEMORRHAGE.

BEING THE FIFTH OF A COURSE

ON THE

COMPLICATIONS AND SEQUELÆ OF LABOR.

DELIVERED IN THE UNIVERSITY MEDICAL COLLEGE, N. Y.

BY T. GAILLARD THOMAS, M.D.,

PHYSICIAN TO BELLEVUE HOSPITAL.

GENTLEMEN:—There are three distinct periods at which the child-bearing woman is liable to an inordinate loss of blood, namely, during pregnancy, during labor, and for one month subsequent to that process.

This division is by no means an arbitrary one, but is demanded by the circumstances of the case, and required for convenience of study and lucidness of understanding. Even the limit of one month given to the third variety is based upon good grounds, for at the end of that time the heretofore hypertrophied uterus having undergone involution so far as to have arrived at nearly its non-pregnant state, any flow taking place thereafter is properly regarded as disconnected with the puerperal condition.

These three distinct periods divide puerperal hemorrhage into three equally distinct varieties, viz.:

Hemorrhage before labor.

Hemorrhage during labor.

Hemorrhage after labor;

or, as they may be styled for convenience of reference,

* Ante-partum hemorrhage.

Parturient

Post-partum

The nature of the course which now occupies us will preclude the investigation of the first of these varieties, and we will proceed at once to that of the second.

Parturient hemorrhage includes every excessive flow occurring during the act of parturition, whatever be its source, its violence, or its results.

SOURCES OF PARTURIENT HEMORRHAGE.

The sources from which this hemorrhage may occur are these:

(a) The ruptured vessels of the os and cervix uteri.

(b) " " " " body of the uterus.

(c) " " " " umbilical cord.

(d) " " " " vulva.

(e) " " " " which unite the uterus and placenta.

(a) As the os and cervix uteri dilate in the first stage of labor, the arterioles which thickly stud the mucous membrane generally rupture, a small amount of blood pours forth, mingles with the tenacious secretion of the glands of Naboth, and constitutes what has been called, in the language of the lying-in room, the "shew." Sometimes this flow amounts to two or three ounces, but this is exceptional, the rule being that it is just sufficient to thoroughly tinge the mucus with which it mingles. It therefore does not deserve the technical name of hemorrhage, and scarcely ever, we may even say never (unless injury has been done by the introduction of the hand or of instruments) will it do more than alarm a primiparous woman and call for an assurance of the fact just stated, on the part of the physician.

(b) One of the symptoms of rupture of the uterus is a free escape of blood; but recall the terrible symptoms which

mark that appalling accident, and you will see at a glance that they will at once remove the case from the classification of hemorrhage, and place it in that of the most fatal of the complications of labor. In other words, the gravity of the accompanying symptoms will mask this one entirely, and cast it completely into the shade.

(c) Rupture of the vessels, or of one vessel, of the funis umbilicalis can at this day be no longer a matter of doubt, since in evidence of its occurrence appear the names of Delamotte, Levret, Baudelocque, Naegle, Cazeaux, and many others. It is, however, a rare accident, fortunately for diagnosis, since there are no means other than mere absence of constitutional signs on the part of the woman, by which it could be differentiated from rupture of the utero-placental vessels.

(d) When the flow occurs from rupture of the vessels of the vagina or bulbi vestibuli, it will generally have been the result of some violence, and our attention will likely be drawn to it by the sensation of pain on the part of the patient. Should it not, an examination, digital or ocular, will readily reveal it.

The first of the four causes which have been so far examined into is insufficient to produce a flow really deserving of the denomination of hemorrhage; the second is accompanied by other grave symptoms which make this one a secondary matter; the third and fourth are of very rare occurrence, and it may be safely announced as a rule that *whenever, during labor, a hemorrhage occurs, it arises from partial separation of the placenta from the uterus, and consequent rupture of the utero-placental vessels.*

Varieties.—Generally the placenta is so placed in the uterus that the os may dilate and the child be expelled without its separation being involved in these processes, and it will, under such circumstances, retain its position and the integrity of its attachment, unless some untoward accident, such as a blow or fall, occur to displace it. At other times, however, it is attached to one side of the cervix, or over the entire cervix, so as to prevent the dilatation of this part, through which the child cannot pass as long as it remains closed. Now as the os and cervix *must* be dilated to permit the passage of the child, and as their dilatation *must*, under these circumstances, to a greater or less extent, detach the placenta and rupture the utero-placental vessels, it follows, as a deduction, that hemorrhage thence resulting is not produced by accident, but, *ex necessitate rei*, is unavoidable.

For these reasons, all hemorrhages occurring during labor, have been very properly divided into

1st, Accidental hemorrhage.

2d, Unavoidable hemorrhage.

The second variety, you perceive, is synonymous with placenta prævia, an appellation which defines the unfortunate location of the afterbirth which produces it.

Leaving the subject of placenta prævia and its resulting unavoidable hemorrhage for our next lecture, I will occupy you to-day with the consideration of that variety which is purely the effect of some accident, and which, like every other accident, might, under favorable circumstances, have been avoided.

ACCIDENTAL PARTURIENT HEMORRHAGE.

Frequency and Prognosis.—You will, I imagine, get a much more correct notion of the frequency of accidental hemorrhage, by an examination of the reports of one faithful observer, than by averaging a large number of cases collected in the loose and unreliable manner which ordinarily characterizes the accumulation of statistical evidence. Dr. Collins, during a mastership of the Dublin Lying-in Asylum of seven years, had 18,654 births occur under his supervision, and in this immense number only thirteen cases of this variety of flooding were met with; considerably less than one in one thousand. Small as this proportion is, however, it is larger than it should be for true accidental parturient hemorrhage, since Dr. Collins brought

* The strict meaning of "ante-partum" is "before having brought forth," and a more exact term would be "ante-parturient," but the connexion will prevent any confusion, and the substitution of a new for an old familiar name is not desirable.

under the same head all those cases occurring during the three last months of pregnancy and during labor.

Of the thirteen women thus attacked, two died, and both after serious operations; one after version, and the other after craniotomy, so that it is by no means proper to conclude that they died from the hemorrhage. Of the children one only was born alive.

Thus you will perceive that the accident is not of frequent occurrence, that the prognosis for the mother is good, and that that for the child is decidedly bad. I refrain from giving you other statistical statements on this point, from the fact that authors generally confound the two first varieties of hemorrhage together.

Causes.—The pathological state causing the flow, is, as already mentioned, rupture of the vessels which pass from the uterus into the placenta. The causes which bring about such rupture are numerous, since any kind of violence sufficiently great for the separation of the placenta would accomplish it.

The chief are Blows or falls.

Sudden uterine contraction from mental emotion.

Sudden shocks or succussions given to the uterus, as from laughter, vomiting, &c.

Dragging off of the placenta by shortness of the cord, or its repeated winding around the child's neck.

Placental apoplexy occurring near the periphery of the organ.

There are other and less frequent and conspicuous causes, but it would be useless to name them, since, as I have said, any accident which severs the utero-placental attachment would produce it.

Symptoms and Diagnosis.—As the prognosis, and more especially the treatment of the two varieties of parturient hemorrhage differ from each other very much indeed, it is of great importance that the accoucheur should determine at once as to which one he has to deal with, and that his decision be as far as possible positive and final. This he will in many cases do without difficulty, but sometimes he will have to remain in suspense for a short period until the progress of the case enlightens him and determines the point.

Denman on this point justly remarks: "Before there is some dilatation of the os uteri, be the discharge ever so profuse, and it may even at this time be excessive, I do not know that it is always possible to tell with certainty whether the placenta is present or not. It may indeed be conjectured that the placenta is there attached by the cushion-like feel of the cervix and lower parts of the uterus." He then goes on to remark how, even after dilatation of the os, a clot of blood may be mistaken for the placenta.

The only reliable means for determining the nature of the flow are these:

In Accidental Hemorrhage,

- (a) There will have been no ante-partum loss.
- (b) Uterine efforts will diminish the flow.
- (c) An evident cause will generally be found for it.
- (d) The loss is not generally very profuse.
- (e) The placenta cannot be touched.
- (f) Os uteri will be natural to the touch.
- (g) Placental murmur loudest near fundus.

In Unavoidable Hemorrhage,

- (a) There will have been hemorrhage during the last month or months of pregnancy.
- (b) Uterine efforts will increase the flow.
- (c) No cause will be found for it.
- (d) The loss is often sudden and profuse.
- (e) The edge of placenta may be touched.
- (f) Os uteri will be thicker than ordinary.
- (g) Placental murmur loudest in one or other iliac fossa.

As a little reflection will readily explain to you why these two varieties should be characterized by their respec-

tive symptoms, I will not do more than enunciate them. Let me insist, however, upon the importance of an early and positive diagnosis, if such is within the range of possibility. Of all the symptoms mentioned, the presence of the placenta near the os is the most valuable, and this one you must thoroughly test. Do not be satisfied with temporizing with digital examinations if they are not sufficient, but explaining the necessity to your patient, pass the entire hand into the vagina; if the os is dilatable pass the index finger well up into the cervical canal, and ascertain to your full satisfaction whether you have or have not a case of placenta prævia to deal with. As a matter of course, if the rational signs point strongly to the supposition that the case is one of accidental hemorrhage, and there is no immediate danger, you would not expose your patient to the annoyance and pain attendant upon this procedure; but far better would it be to err on that side, than by a culpable inactivity to remain ignorant of a point upon the knowledge of which so much will depend.

Treatment.—A parturient uterine hemorrhage should be treated upon precisely the same principles which should guide us in the management of such an accident taking place from any other part of the body. This you may, at first thought, regard as a sweeping assertion; but as we proceed you will perceive that, although from the nature of the locality from which the flow occurs, the means employed for developing the principles may differ, the principles themselves are identical.

Let us suppose, for example, that a hemorrhage should occur from any part of the surface of the body, as the result of a wound or abrasion, and let us follow out the principles which one after another would be employed by the surgeon, until he finally succeeds in checking it.

1st. If the flow were slight the patient would be kept perfectly quiet, and an effort made to constrict the mouths of the bleeding vessels by cold and styptic applications, as ice, alum, tannin, matico, etc.

2d. Should these very useful and commonly employed hemostatic agents fail in making this principle effective, an attempt might be made to cause in the wound the formation of a coagulum, which, extending up into the mouths of the bleeding vessels, might seal them up as is done by plugging the anterior nares alone, or with the posterior, in epistaxis.

3d. Should this fail, a very excellent principle, that of closing the open arterioles by firmly compressing their walls, might be developed by direct pressure, as is done, for instance, in hemorrhage from the palmar arch, by placing a billiard ball in the palm of the hand, and binding it firmly in its place by a bandage.

4th. Should even this fail, still another and surer one exists in the application of a ligature to the bleeding vessels; and to it the surgeon would now with confidence resort.

Thus, one after another he has brought to his assistance four principles, each valuable in itself, each differing from the one tried before it, and all capped by one which is as certain in its results as human means can ever be.

Thus, too, gentlemen, in parturient hemorrhage the obstetrician should act; and he will find that, if the first three of these four principles fail him, he, like the surgeon, will have one left which will prove as certain as the ligature.

In establishing these principles, always be mindful of the pathological state which causes the dangerous symptoms which they are to control; i. e. that a portion of the placenta has been torn off from its uterine attachment, and that from its disrupted face, as well as from the corresponding surface of the uterus from which it was torn, the blood is welling forth.

In a case of accidental parturient hemorrhage, the first indication to be fulfilled is to check the flow by constricting the mouths of these vessels; and this will best be accomplished by confining the patient to bed in the supine posture, and absolutely prohibiting all muscular effort or

mental exercise, even that attendant upon speaking; by keeping the apartment cool; by administering cold, acidulated drinks, as lemonade, or water acidulated with the elixir of vitriol; by applying towels soaked with cold water, or vinegar and water, to the vulva and over the uterus, and by prescribing astringents, as tannic or gallic acid in full dose, which being carried to the bleeding vessels by the circulation, may aid in producing the same result which their local application effects in vascular rupture elsewhere.

If by these means we succeed, we will have good cause for congratulation, for we will have relieved the woman without having in any way sacrificed the chances of her child. If they do not succeed, then we must resort to some other plan which may prove more effectual, and we enter into the consideration of the adoption of the second principle. The only available means at our command for causing a clot to form in utero, under these circumstances, is the tampon or vaginal plug, an agent advised by many, and one which might accomplish the result as perfectly as do the double tampons employed in epistaxis. But there are dangers attending its use so great, that I must not only guard you against them, but advise an avoidance of this means in parturient hemorrhage, except in rare and particular cases. I would say in advance, *avoid the tampon as a rule, after the seventh month of pregnancy, but employ it boldly, even at full term, in a few exceptional and peculiar cases.*

The tampon, gentlemen, may be styled one of the most useful and dangerous of our uterine hæmostatics, and it is really curious to see how different and even contradictory is the advice which is given concerning the propriety of its employment. Let me, by an excusable and called-for digression, endeavor to fix in your minds this morning a few maxims concerning it.

A plug introduced into the vagina, of sufficient size to fill the canal, acts in uterine hemorrhage in these two ways—preventing the escape of the fluid which is flowing out of the uterus; this collects, and gradually is “backed” into the cavity above; soon it distends this cavity to its utmost extent; if the fetal mass is present, insinuates itself between the chorion and uterine wall, and at last forcibly dilating the os by distension of the whole organ, produces a powerful expulsive effort which frequently expels child, accumulated blood, and tampon together. When the uterus is not dilatable by the accumulating blood, this fluid coagulates within its cavity; the coagulum, beginning to form at the os, extends upwards towards the source of the hemorrhage, and will often seal up the mouths of the bleeding vessels.

Both these results are often very desirable, and to accomplish them no means compares with the tampon. But after the seventh month of pregnancy the uterus is so large that it may contain a sufficient amount of blood to produce death, so that from this period to the completion of labor it is always attended by danger. (I need not insist upon the gross impropriety of the employment of such a means after delivery.)

Thus then, although the tampon might effect much for us in parturient hemorrhage, as a rule it should not be employed; and, in exceptional cases which demand it, should be resorted to only after mature consideration, and its effects be watched with very careful scrutiny. Observe these rules in using it.

Never employ the tampon *from choice* when there is a possibility of a dangerous internal hemorrhage.

At full term do not employ it after the waters have been discharged, for then the uterus will accommodate a large amount of blood.

Never employ it at full term after your patient has lost a great deal of blood, or from natural feebleness of body would be endangered by even a slight hemorrhage.

In a strong woman who has not already lost a good deal of blood, in whom the uterus is contracting well, and whose bag of waters has not been ruptured, I would not hesitate

to employ it if other means failed, or from any reason I deemed them inapplicable.

Should the principle which is developed by the tampon be beyond our reach on account of the danger of the means which accomplishes it, or, should it have been unsuccessfully resorted to, how are we to avail ourselves of the third?

You remember that the flow of blood in accidental parturient hemorrhage is checked by uterine contraction, and that this is so marked as to constitute one of its characteristic symptoms; now let us examine this fact. When the organ contracts, the bleeding surfaces of the placenta and uterus are pressed firmly against the fetal mass, and thus their open vessels are shut. If we could cause this pressure to be continuous and powerful, at the same time that it was resisted by a hard mass, we would cause the flow to cease entirely, and would be acting exactly as the surgeon does who binds the billiard ball in the palm of the hand. But you may ask how are we to introduce a hard resisting body into the uterus to act as counterpart of the ivory ball? We are supplied with such a substance in the body of the child. Surrounded by the soft and pliable bag of waters, one chief object of which is to prevent its hardness from being perceived by the sensitive uterus, it lacks the feature of resistance which we now desire; but evacuate the surrounding waters by puncturing the bag, and instantly the unyielding body presses against the hemorrhagic spot, and the principle is developed.

This, however, although often sufficient, is not always so the pressure not being powerful enough. Under such circumstances, in the case of a palmar hemorrhage, the surgeon would remove his loose bandage, and apply another which would make all the pressure desirable. And so the obstetrician, by the administration of small doses of ergot, can so force his point of resistance against the bleeding surface as to compress entirely the ruptured vessels and render them impermeable. By these means you not only bring to your aid the principle mentioned, but, to a certain extent, you will establish that which will be mentioned fourth, for the vessels are diminished by the same contractions which press the child against the bleeding surface. According to my experience it is rare for them to fail. In fact, I have never known them do so in true accidental hemorrhage. Should they do so, however, but one resort remains, and that is ligation of the vessels from which the obstinate current flows. Have we any means by which ligatures may be thus applied in utero? Again bountiful nature comes to our aid, and we have but to use the means which she presents us and our end is accomplished. After every natural labor, were there not some arrangement for checking the flow from the broken utero-placental vessels, a hemorrhage would occur, but so soon as the uterus is emptied the fibres contract, diminish its size very greatly, and being arranged around the mouths of the vessels as the meshes of a netted purse are around the finger which is pushed through them, they inevitably close these mouths, and prevent all sanguineous loss.

After having tried in vain, by the development of the three principles mentioned, to accomplish what we wish, naught remains but to empty the uterus, force it into contraction, and cause nature to do what the surgeon does in external hemorrhage. If the head can be seized by the forceps, employ them; should it be out of their reach, accept of version as the alternative, and deliver promptly. Thus by successive steps the scientific obstetrician advances from mild, harmless, but correspondingly inefficient means, to more dangerous, and proportionately more effectual ones, until he arrives at a point at which he can safely say, “I will by this surely succeed in staying the flow, and will rescue my patient from its dangers.”

But do not despise the more inefficient means because a more effectual one exists. Would you not blame the surgeon, who, for a slight hemorrhage, should tie the supplying arteries without seeing what might be done by styptics, pressure, etc.?

Keep the most efficient agent in reserve, *because it is accompanied by danger for mother and child*, and always strive to accomplish your ends by the mildest, least dangerous, and apparently most trifling means. Should you succeed, a host of unthought-of evils lurking like harpies in the shade, may by your moderation be avoided; should you not, then promptly apply the most efficient and most dangerous of your resources, which, like a "corps de reserve" you have kept until the fitting moment.

What has been denominated, gentlemen, "heroic practice," often marks the course of the ignorant and unreflecting obstetrician; and although the vulgar may be blinded by its show of energy, decision, and promptness, and led to believe it an evidence of knowledge, it will often bring about consequences alike disastrous and avoidable.

The skilful general does not fire a twelve-pounder at a handful of marauders who could be dispersed by a musket-shot, nor does he trust to his muskets when an army is upon him in its might.

Never lose sight, too, of this fact in treating a complication of labor, that the interests of two beings are intrusted to your care, and that while you are to do all in your power for those of the mother, those of the child are scarcely less imperative. If, then, in the treatment of this accident, you can adopt means which will accomplish both ends, give them by all means the preference over those which, even if more surely effectual, in removing the woman from danger, will sacrifice the chances of the child.

The older one grows in obstetric experience, the more convinced does he become that many a woman has died from the unnecessary introduction of the hand into the uterus; that many a uterus has been ruptured by uncalled for violence; and that Herod destroyed not a tithe of the children which have been killed in utero by the reckless use of ergot.

The following is a résumé of the treatment which has been recommended in this lecture, the principle upon which each procedure acts being italicised.

1st. *Constricts the bleeding vessels* by cold to the uterus and vulva, acidulated drinks, astringents, and perfect rest in the recumbent posture.

2d. In case of failure *cause a clot to form in the mouths of the bleeding vessels* by the tampon, should the case be one in which this practice would be safe.

3d. Should this fail, *make direct pressure against the bleeding vessels* by evacuation of the waters, and increase it if necessary by the use of ergot.

4th. None of these means succeeding, *ligate the vessels* by evacuating the uterus, and causing firm contraction.

As I have alluded to certain cases in which the tampon might, in a woman for whom we did not fear a slight loss of blood, be preferable to an immediate resort to rupture of the membranes, it may be well for me to give you an example. There are several cases where it might be preferable, but this will serve as a type: in a transverse presentation before the os is dilatable, rupture of the bag and administration of ergot would much complicate the operation of version, and thus endanger both mother and child. Should accidental hemorrhage occur in such a case, then it would be advisable to gain time for dilatation of the os by the use of a means which offers the probability of checking the flow without wasting the precious fluid which is to facilitate a dangerous operation.

Because this means is attended by danger I would not entirely discard it; but let that be a sufficient reason for its not being employed, except when absolutely necessary, and for its effects being watched with the utmost caution.

THE Cholera, according to the "Siglo Medico," of Madrid, has taken up permanent residence in Spain since 1854. It gives, as proof, the official statistics of cholera patients who have died at Malaga this year, between May 1 and June 29. They amount to 2267. The cholera has also shown itself in other parts—in the province of Jaen, at Linares, at Baylen, in Grenada, etc.—*Med. Times & Gaz.*

Original Communications.

A STATISTICAL CONTRIBUTION

TO THE

DIAGNOSIS OF CANCER OF THE STOMACH.

BY

JAMES C. ORTON, M.D.,

OF NEW JERSEY.

THE following paper is based upon an analysis of sixty recorded cases of cancer of the stomach, collected principally from periodical medical literature. These cases are generally not well reported, the writer having too exclusively a single idea in view, and paying too little attention to other but less prominent facts. In taking, however, the aggregate of cases, each has a relative importance, and one in a measure corrects the other.

Of all the internal organs of the body, with the single exception of the liver, the stomach is most frequently the seat of malignant disease. From reliable mortuary reports of continental cities, it appears that nearly one-fourth of all the fatal cases of cancer have their origin in the stomach. It is impossible, from the imperfect manner in which registration is kept, to arrive at any other than the most general conclusion as to the accuracy of this statement in regard to the disease in this country. We may, however, in the most general manner, state that cancer of the stomach is more frequent in old luxurious cities, than where the style of living is comparatively simple. The period of life at which cancer is most liable to attack the stomach is included between the sixtieth and seventieth years. It is next most frequent between the fortieth and fiftieth years. Under twenty-five I am not aware that it ever occurs as a primitive affection, while the upward limit cannot be defined. (a) Males are more subject to it than females, in the proportion of four to one, and married females to the unmarried, in the proportion of six to one. It is impossible to decide as to the influence of habits or occupation in the production of this disease. The intemperate rank about equally with the temperate, (b) while all the trades and professions are represented in about the proportion of the numbers who follow them respectively.

CARDIAC EXTREMITTY.

Cancer occurs at the cardiac orifice of the stomach less frequently than at the pyloric, or in the body of the organ. Males are more liable to be the subjects of this situation of cancer than females in the ratio of nine to one. (c) It is eminently a disease of advanced life, the majority of cases occurring after the age of sixty, and but seldom previously to the age of fifty. No predisposition or habit of life seems to determine the location of cancer in this situation. The subjects of it are generally of advanced age, temperate, and engaged in healthful occupations. The exceptions to this rule are not of a kind to invalidate it. The duration of the disease rarely extends over several years from the occurrence even of the first symptoms. The great majority terminate fatally within one year, while about half do not live beyond six months. (d) The symptoms of cancer of the cardiac extremity of the stomach vary with its seat, whether located within the orifice, primarily, or seated in the cardiac portion of the organ, and extending and involving the cardia secondarily. They vary also according to the nature

(a) The analysis of 60 cases gives 26, 2; 29, 1; 30 to 40, 10; 40 to 50, 15; 50 to 60, 11; 60 to 70, 18; 70, 71, 72, 73, 82, each one.

(b) Of intemperate there are given 5; temperate, 6.

(c) Of 60 cases, 10 were at the cardiac orifice, 16 in the body, and 34 at the pylorus. Louis collected 18 cases, which gave, cardia, 1; body, 5; and pylorus, 7. Bouilland gives 8; cardia, 1; body, 2; pylorus, 5. Of 10 cases, 9 were males, 1 female. Of 10 cases, 1 was between 50 and 60; 1, 40 and 50; 2, 50 and 60; 5, 60 and 70; 1, 72.

(d) Of 10 cases, 3 lived 8 months; 2, 6 months; 1, 8 months; 2, 1 year; 1, 2 years; 2, several years. Of 10 cases, 6 were scirrhus; 2, Encephaloid; and 1 mixed; 1, doubtful.

of the cancerous growth, whether it be of the scirrhus or encephaloid variety. When cancer is situated at the cardiac orifice, the earliest symptom is dysphagia,^(a) or difficulty of swallowing food, attended with nausea, which soon amounts to vomiting of ingested matters. If the cancer is of the scirrhus variety, these symptoms may continue for a considerable time, and be intermittent in their severity. The dysphagia is a most distressing symptom, attended with severe pain at the pit of the stomach, and sometimes with paroxysms of threatened suffocation. The patient complains that his food does not enter his stomach, and that his stomach is closing up. He indicates very nearly the point of stoppage of his food at the cardiac orifice. These symptoms are diagnostic of the seat of the stricture. The pain which attends efforts at deglutition is caused by the arrest of the bolus at the strictured point, and extends to the back, shoulder blades, and hypochondria. In these situations it is of a dull, aching kind, while at the cardia it is often extremely violent and lancinating, and only relieved by the rejection of the food, or its passage beyond the stricture into the stomach. The pain is, however, by no means constant in its character and seat, depending probably much upon the degree of constriction, and occasionally upon the nerves implicated.^(b) It may be so constant as to simulate gastritis, or it may be so violent as to resemble angina, and lead to attacks of convulsive diseases. In this manner cancer of the cardia has been treated for hepatitis, gastritis, colic, angina, and chorea. Undoubtedly, in this latter case, the par vagum was involved, as on dissection it has been found in other cases. Pain, as a diagnostic symptom, must be estimated by its seat and relation to the dysphagia. When located about the ensiform cartilage, fixed, unvarying, and lancinating, or of a dull aching character during the efforts of deglutition, it becomes of considerable importance. In itself considered, however, it has no diagnostic value.

Vomiting is an early symptom,^(c) generally immediately succeeding the appearance of dysphagia. It seldom, if ever, precedes this latter symptom in cancer of the orifice alone.^(d) The peculiarity of the vomiting is, that it promptly follows the ingestion of food, and on this account is of great value in diagnosis. This vomiting is noticed in some instances as being easy, free from retching and pain, or it may be very painful. It is intermittent in severity, often being absent for several days or even weeks together. In these cases the disease is very slow in its development and progress, extending over several years, or it progresses very rapidly, and is of the encephaloid variety, the freedom from dysphagia and vomiting being due to the ulceration of the cancerous growth, and consequent enlargement of the orifice. Two peculiarities, almost without exception, mark the vomiting in the latter stages of the disease. More frequently the progressive constriction of the orifice, by the growth of the cancerous mass, finally amounts to a complete arrest of solid food in its passage to the stomach, and a consequent regurgitation of the ingesta in an unaltered state.^(e) Less often, vomiting of blood occurs, which marks the ulcerative stage of cancer, and generally the encephaloid variety. In either case, taken in connexion with other symptoms, it gives unmistakable evidence of the nature, seat, and stage of the disease. Allied to vomiting is a discharge of ropy mucus from the mouth, which is sometimes constantly present. This discharge is often sour and very offensive.

The appearance of a defined tumor in the progress of the case, marks the character of the growth as encephaloid. This is due to the greater extent of this form of cancer, and

its tendency to involve greater surface by encroaching upon the stomach itself. The tumor is located at the pit of the stomach or under the ensiform cartilage, and is painful on pressure, and occasionally pulsates.^(a) Its location at the ensiform cartilage, taken with other symptoms, gives it great value in accurate diagnosis. If but a slight degree of hardness is felt, it is scirrhus probably.

Of the symptoms more remote from the stomach, but consequent upon the disease existing within it, the earliest is constipation. This is due to the absence of solid food. In one case, however, diarrhoea with bloody discharges ushered in the disease. This may be easily explained by the fact that the cancer was encephaloid, and involved a considerable portion of the cardiac extremity. But when the disease involves principally or primarily the orifice, admitting only the introduction of liquids, constipation is the natural consequence. Later in the history of the case, diarrhoea supervenes, owing to the irritation of the cancerous debris, resulting from ulceration, and dark colored, offensive stools are discharged.

As a necessary result also of this difficulty of introducing substances into the stomach, emaciation commences early, and gradually progresses, until in some instances, where the sufferer dies of inanition, it reaches an extreme degree.^(b)

The emaciation, of course, has a direct ratio to the degree of dysphagia which exists. In extreme cases it has become impossible even to swallow liquids. The dysphagia again has a direct relation to the condition of the morbid growth whether it be scirrhus or encephaloid, or whether it entirely or only partially surrounds the orifice. If the stricture be encephaloid, it forms a tumor which will early ulcerate, and render the orifice again patulous, and before emaciation has far advanced, food may again be introduced into the stomach. But if the stricture be purely scirrhus, as it far more often is, it will generally surround the orifice, and gradually but progressively contract its calibre until it prevents the passage even of liquids, unless relieved by ulceration. It is fair to presume therefore that those cases, attended with the greatest degree of emaciation, are of the encephaloid variety.

The general symptoms of this form of cancer are not striking. The appetite is often voracious owing, to the obstacle to taking food; the tongue is often coated, but this is due to the state of the bowels suffering constipation; the countenance is never characterized by the sallowness of cancer.^(c)

BODY OF THE STOMACH.

As anatomically, so also pathologically the body of the stomach occupies a position intermediate to that of the orifices, in respect to frequency as the seat of cancer. The period of life at which it generally occurs is about the age of sixty.^(d) Males are four times more subject to it than females.^(e) To no occupation, habit of life, or peculiar temperament, can the attack be traced.

Every portion of the body does not seem to be equally liable to cancer. First in order of frequency is the larger curvature with the great cul-de-sac; second, the body generally; lastly, the smaller curvature.

We have shown that cancer, occupying primitively and only the cardiac orifice, is without exception scirrhus. Cancer of the body, on the other hand, is always encephaloid or colloid, with one exception, and that is when it is primarily seated in the smaller curve.^(f)

The duration of this disease is variable, but generally extends over several years. Often dyspeptic symptoms

(a) In 7 cases, limited to cardiac orifice, 5 had dysphagia as the first well marked symptom.

(b) In one case, there was intense pain in the chest, which subsided, but no pain in stomach. This returned without relief, and ended in attacks of chorea, every seven days; no vomiting or symptoms about stomach, except appearance of a tumor.—*Med. Chir. Rev. July, 1887.*

(c) Of 10 cases, 9 had vomiting as an early symptom; 1 no vomiting at all.

(d) Of 7 cases, 6 had dysphagia and vomiting; 1 not mentioned. In one case it lasted several years.

(e) Of 10 cases, 8 had regurgitation of the food near termination of disease; 2 vomiting of blood; 3 simple vomiting of whom one died of dysentery, the other suddenly; 1, no vomiting, but had chorea, etc.

(a) In 4 cases tumor was felt; 3 encephaloid, and extended into stomach; 1, doubtful; 1, scirrhus, but just discernible.

(b) Of ten, seven were emaciated, three not greatly.

(c) Of ten cases, one note is made of the countenance, and that is that it was very dark.

(d) 26, 36; 40 to 50, 4; 50 to 60, 4; 60 to 65, 5, (83).

(e) Of sixteen cases, twelve were males, four females.

(f) Of six cases in large curve all were encephaloid; three in small, all were scirrhus.

are complained of for upwards of twenty years, when the severe symptoms set in and the case terminates fatally within a few months from this attack. The shortest period given was two months. (a)

The symptoms vary with the seat and character of the growth, whether it be in the greater or smaller curvature, and these localities determine for the most part whether it is scirrhus or encephaloid.

The earliest symptoms which arise from cancer of the body of the stomach, seated in the larger curve, cannot be distinguished from those of ordinary cases of dyspepsia. These do not, however, continue long previously to the onset of a new and marked series of symptoms which are peculiar to the malignant disease. Patients usually acknowledge, on being questioned, that they have long suffered from heartburn, pyrosis, etc., but without loss of general health. But when the distinctive symptoms of cancer become manifest, the features of the case materially change.

(To be continued.)

A CASE OF DISLODGMET

OF A

WATERMELON SEED FROM THE BRONCHI,

BY THE OPERATION OF TRACHEOTOMY.

BY CHARLES H. RAWSON, M.D.,

DES MOINES, IOWA.

SAMUEL McCURE, aged 4 years, 6 months, while eating a piece of watermelon on Wednesday, Aug. 22, was suddenly seized with coughing and great dyspnoea, and it was supposed a seed had passed into the larynx or trachea. He had occasional paroxysms of dyspnoea, and then comparative ease and quiet, but not free and easy respiration. Saturday morning it was thought advisable by Dr. Ward, of Carlyle, who had previously seen him, to have further advice, and the Doctor and Mr. McClure came to the city with the child, a distance of seven miles. The ride to town did not agree with the patient, for he was reported as quite easy before starting, but grew worse on the road. I saw him at 12 M.; his respirations were thirty-five, very laborious, and inspirations long and very difficult; pulse irregular in force and frequency; surface bathed in perspiration, and patient very restless, and constantly changing his position. Occasionally, he would sleep a few minutes, but respiration was harsh and hurried, and grew worse on waking. Auscultation did not locate the obstruction, for air entered all portions of the lungs, but in diminished quantity. Coarse mucous râles were heard over all portions, particularly the upper; frothy sputa in abundance could be seen in the fauces. Drs. Whitman, Davis, Skinner, Ward, and myself saw the case, and from the impending symptoms were satisfied the child could not long survive without an operation, which seemed to be the only alternative, although we were not able to locate the obstruction. Accordingly, I proceeded, at about half-past two o'clock, with the assistance of the above-named gentlemen, to perform the operation of tracheotomy. The patient was placed in the usual position, but great difficulty was encountered by the number and size of the veins crossing and recrossing the median line. The thyroid gland was as high as the cricoid cartilage covering the trachea at the point of operation, and adhered with great tenacity to it, making it very difficult to separate at the isthmus. The number of vessels, some of which were pushed aside, others ligated, the firmness of the tissues, and the position of the gland, retarded the operation. Three rings of the trachea were divided, and air escaped freely with abundance of frothy mucus. No foreign body made its appearance, and

as the obstruction seemed to be more in the larynx, I passed a catheter into the opening and up through the larynx into the fauces, but no relief followed. As respiration was very difficult, I now introduced a tube which gave slight relief. After about fifteen minutes, severe coughing came on, and I suddenly removed the tube, and a very large watermelon seed was coughed up, and thrown with considerable force through the opening three feet above the patient. This gave great relief for a few minutes, but I was soon obliged to replace the tube, to again relieve the breathing. Waiting half an hour, and supposing, of course, as the seed had been removed the difficulty would be relieved, it was thought advisable to again remove the tube, and see if the patient could not do without it; but strangulation took place immediately, and I had great difficulty in replacing the tube in time to save the patient—showing that obstruction of some kind existed in the larynx. The tube being replaced, respiration was free and easy. No anæsthetic was used. 9 o'clock P.M.—Pulse 145; respiration 41; reaction fully established, and patient restless; gave Dover's powder gr. ij. and verat. viride two drops every three hours.

8 o'clock A.M., 26th.—Patient passed a comfortable night, though restless at times. Pulse 130; respiration 31; skin cooler than last night; tongue covered with white fur; breathes principally through the tube, and from the collection of secretions in it, obstructing respiration, it was thought advisable to remove it for cleaning, and possibly it need not be replaced. On removal, considerable mucus was expelled from the opening, after which respiration was comparatively easy, but mostly through the opening. Any attempt at closing, to force the air through the natural passages, produced instant cough and strangulation, indicating that obstruction still existed in the larynx, probably as the result of irritation or effusion. Bowels moved, and no medicines given. 2 P.M.—Patient quiet; pulse 125; respiration 28; skin moist, and little excess of heat. 10 P.M.—Comfortable and asleep; pulse 140; respiration 35; skin moist and hot.

27th, 8 A.M.—Patient passed a good night; pulse 130; respiration 33; coughs, and raises some through the opening, but secretion diminishing; some swelling around the opening; skin moist, and not as hot as at last report; bowels open. Any attempt at closing opening produces cough and strangulation, though the voice and cough are not quite as hoarse as yesterday. 2 P.M.—Very rapid improvement; pulse 114; respiration 28, and easy; tongue cleaning; hoarseness of cough and voice very much diminished; skin moist and cool.

28th, 8 A.M.—Restless through night, but still rapidly improving; pulse 110; respiration 27, free and easy, and mostly through the mouth; tongue nearly clean, and patient sitting up and playing; feels well. The edges of wound were approximated, but could not close them, as it produced difficulty in respiration. The parents of the child removed him home this morning.

Sept. 5th.—Saw the patient to-day; doing well; opening closed internally, but not entirely on surface.

I regard this case as rather unusual, on account of the amount of irritation the seed had caused in the larynx, thereby probably producing extensive effusion in the vocal cords and the mucous tissues around, making it impossible to close the artificial opening for some days, until absorption had taken place.

FRENCH SURGERY.—The question of resection of joints, studied for twelve years with so much interest and care by English and American surgeons, is still little known in France. The resection of the elbow-joint has alone become part of our practice, that of the shoulder has been practised several times; but resection of the knee and the hip have hitherto met with few partisans.

(a) Of sixteen, five suffered two years, two one year, one six, one eight, one two months; two slightly dyspeptic, many years; one died four months after severe symptoms.

Reports of Hospitals.

NURSERY AND CHILD'S HOSPITAL.

TREATMENT OF CHOLERA INFANTUM.

CHOLERA Infantum, which is so prevalent and so much dreaded in warm weather, in our large cities, was much less fatal in the hospital during the past summer than in the corresponding months of last year. Yet a large majority of those who died in June, July, and August, fell victims to it; and those who were carried off by other diseases, in the same period, commonly presented, in a greater or less degree, the lesions of cholera infantum. As regards the symptoms, few points of special interest were observed. The physicians in attendance remarked at times an unusual tendency to dysentery, as shown by the tenesmus and muco-sanguineous stools, and some cases occurred of extreme and rapid prostration, with but little looseness of the bowels.

The treatment pursued, and which in most cases was satisfactory, was as follows:—In the commencement of the disease, a purgative was sometimes administered, either castor oil or calomel; with this exception, no mercurial was prescribed in any stage of the disease. The old idea of congestion or torpidity of the liver, so as to indicate mercurial treatment, has been shown to be erroneous, by the post-mortem examinations made in this institution in cases of cholera-infantum. In some instances this organ has been fatty; but with this exception, it has uniformly been in a healthy condition. The mixtures employed to check the disease contained for the most part some form of opium, usually laudanum, Dover's powder, or the pulv. cret. comp. c. opio. The opiate treatment proved very effectual in quieting the bowels, but it was used cautiously, or not at all in the advanced stages of the disease, when cerebral symptoms were threatening. If there were much febrile action, and especially stools stained with blood, a favorite prescription was the well-known castor-oil mixture recommended by Dr. West. In the advanced stages of the disease, and in the beginning, if the dejections were frequent and watery, astringents were prescribed, ordinarily kino, tannin, or gallic acid. The following powders were sometimes beneficially employed in these cases:—B. Pulv. rhei, gr. ii., pulv. kino, gr. vi., Sodæ bicarb. gr. xii. M. Divid in chart. No. xii. Dose, one powder from three to six hours. The tannic and gallic acids were given in doses of one-half to three-fourths of a grain to children one year old. The following is an excellent formula, as it disguises the taste of the astringent:—B. Acidi gallici, gr. viij., tinct. cinnamomi co. 3 i., tinct. opii, Mviii., syrupi, 3 ii., aquæ cinnamomi, 3 v., aquæ pur. §i. Geranin, the active principle of the geranium maculatum, was prescribed by Dr. Jones in several cases, but its effects were uncertain, and it was discontinued. Alkalies were also generally administered, especially lime-water, and bicarbonate of soda; these often relieved the vomiting, and sometimes diminished the frequency of the dejections. The alkaline treatment was rational, as there is, almost, uniformly, acidity of the primæ viæ in this complaint except in the last stages, when intestinal ulceration has occurred. The lime water was oftener administered as the antacid, and in order to be effectual, it was necessary to give it at short intervals.

The vomiting in cholera infantum is known to be one of the most obstinate symptoms, and one which sometimes, more than the diarrhoea, diminishes the chances of recovery. The physician is often obliged to witness not only the almost instant ejection of nutriment, but also of the remedy on which he believes the safety of the patient depends. To relieve this symptom nothing was found so effectual, especially when the disease had continued some time, as creasote given to a child one year old, in doses of one-eighth of a drop after each vomiting. Occasionally

this was aided by sinapisms to the epigastrium. Much attention was given to the nutrition of these children. Wet-nurses were engaged, if possible, for those under the age of one year; and arrow-root, beef-tea, and other nutritious articles of diet given in addition. Wine or brandy was employed at short intervals, unless at the commencement of the disease. These stimulants were of service not only in sustaining the strength of the patient, but in relieving the vomiting. In only one case out of ten, which were examined after death, was there vascularity of the stomach, however great its irritability had been; and a similar immunity of this organ was observed in the larger number of autopsies made the previous summer, so that no one need be deterred from the use of stimulants in this affection, through fear that gastritis may be present.

BELLEVUE HOSPITAL.

SECOND CASE OF PUERPERAL FEVER SUCCESSFULLY TREATED BY INFUS. DIGITALIS AS THE ARTERIAL SEDATIVE.

[Reported by ALEX. HADDEK, M.D., House Physician.]

ANNA MEIER, aged 18, primipara, confined in the Lying-In department of Bellevue Hospital, July 23, 1860. Labor was natural, easy, and of ordinary duration. Convalescence progressed normally up to August 4; nothing peculiar had been noticed in her case. At this time, without any known exposure, she was seized with a severe chill, followed by fever and increased frequency of pulse, and pain in the lower part of the abdomen, extending upwards. This pain was increased on taking an inspiration, or on pressure; tympanitis very well marked; lochia scanty and offensive; pulse ranged about 130; respiration 30. During the morning of the 5th, she vomited a spinach-like substance; complained of severe pain and uneasiness in the abdomen, which was increasing in severity. Her expression of countenance was fixed and anxious; skin hot and dry; tongue moist, large, and furred. August 5, 10 A.M.—Was sent to the fever ward, being about twenty-four hours after the first symptoms were observed; she had taken several small doses of tr. verat. virid. and sulph. morph., which somewhat reduced her pulse to 120, and quieted her pain; respiration 30.

Having used the infusion of digitalis as an arterial sedative in quite a number of cases of a different character during the several preceding months, and being convinced of the certainty of its action, and the little constitutional disturbance that followed when properly administered, by the approval of Dr. I. E. Taylor, the attending physician, I substituted it for the tr. verat. virid., carefully watching its effects, with the following results:—The last dose of tr. verat. virid. and sulph. morph., in doses of five drops of the former, and half grain of the latter, was given on August 5, 5 A.M.—Pulse 120; respiration 30. At 10 A.M. §i. of the infusion of digitalis was given, and also half grain of the sulph. morphine; the tympanitis was very marked, and there was also present slight nausea, with pain on pressure. 11 A.M.; the frequency of the pulse and respiration the same; the dose of infusion repeated. 12 M., respiration the same; pulse 108; half grain of morphine and ½ ss. of the infusion given. 1 P.M.; there being no change the dose was repeated, and at 2 P.M. the pain in the abdomen had diminished; the pulse was reduced to 96, and the respiration to 20; ¾ ss. of infusion, and one-third grain of opium. 3 P.M.; pulse 102; respiration 18—dose of digitalis repeated. During the next six hours, with the exception of half a grain of morphine, the remedies were suspended; the pulse in the meantime decreasing to 82, and the respiration to 15; the patient in the meantime complained of no pain; the skin was moist, and the pupils became affected. From 10 P.M. to midnight the pulse rose again to 96, while the respiration was at 10; infus. digitalis ¾ ss., and morphine, gr. one-third, prescribed in the meantime. August 6, 2 P.M.

—Pulse had fallen to 65; respiration 10; 3 ii. of the infusion ordered at 1 A.M., and 3 iii. at 7 A.M., at which time about a pint of urine was drawn off, after having been retained twelve hours. Dr. Taylor visited the case early in the afternoon, and advised that the treatment be cautiously pursued, and suggested the propriety of giving, in addition, gr. two of quinine every four hours. From 2 P.M. until 9 P.M. the pulse steadily increased to 84, and the respiration to 16; ordered infus. digitalis $\frac{3}{4}$ ss. Patient rested well during the night, and took 3 ii. of the infusion about 3 A.M. August 7.—At 6½ A.M. pulse was 72, she complained of no pain in abdomen, except when pressure was made upon the part. It was necessary to relieve her bladder by the catheter. From 6½ A.M. until 3 P.M. the pulse ranged from 72 to 90, 3 ii. of the remedy having been administered at 11 A.M., and the same dose repeated at 2½ P.M. From 3 P.M. to 11 P.M. the pulse decreased to 64, the respiration at that time being 18; $\frac{3}{4}$ ss. given at 4 P.M. August 8, 1 A.M.—The pulse was 60, the patient felt very comfortable. In the course of the day the pulse ranged as high as 78, but none of the infusion was ordered. August 9, 9 A.M.—Patient complains of severe pain in the right iliac region, in which situation a tumor can be felt; tympanitis has mostly subsided. Ordered emplastr. vesicat., 4 by 4, over seat of pain. 2½ P.M.; the pain was very much diminished, and at 6 P.M. disappeared altogether after the application of Majendie's solution to the blistered surface. By the aid of an anodyne she rested well during the night, the pulse at 11 P.M. being 75. August 9.—Pulse 75; complains of soreness over the abdomen and pain on motion; sulph. morph. gr. one quarter, which dose was repeated, 9 A.M., but without producing the desired effect. 11 A.M., the blistered surface was dressed with the sulph. morphine, and in the course of two hours the pain subsided very much; the skin, however, becoming feverish about 1 P.M. 3 ii. of the infusion was administered, the pulse being 100. At 3½ P.M. $\frac{3}{4}$ ss. was given, and by 9 P.M. the skin was moist; the pain entirely gone, and the pulse 84. August 11.—No change for the worse; the pulse being weak, brandy and beef tea were ordered. August 12.—The surface of body feverish; pain in tumor returned. Took $\frac{3}{4}$ ss. of infusion and one-third grain of morphine, and in a little over two hours pulse was 72. The pain, however, still continuing, another dose of morphine (gr. one quarter) was prescribed, which produced the desired effect. August 13.—Patient was fairly convalescent, and in due time was discharged from the Hospital perfectly cured.

BROOKLYN CITY HOSPITAL.

COMPOUND FRACTURE OF THIGH—RECOVERY.

[Reported by A. D. WILLSON, M.D., House Surgeon.]

JAMES THURSTON, set. 45, healthy, a moderate drinker, was admitted under Dr. Enos, July 5th, 1860, with a compound fracture of the femur at junction of the middle and lower thirds, caused by the limb being caught between the spokes of his cart. The wound in the soft parts made by protruding bone was about two inches in length, and situated posteriorly. Shortening one inch; venous hemorrhage quite free; pulse one hundred, tolerably full; surface pale and cool. Gave whiskey $\frac{3}{4}$ i. with liq. opii comp. gtts. xxv. Adjusted limb to the double inclined plane for the night, approximating the lips of the wound by means of adhesive strips. The next day the patient having fully reacted, he was put on the "Burge apparatus," which allowed of free access to the wound without in the least disturbing either the limb or the patient. An ordinary back splint was used, with a semi-circular piece cut out of its side at a point corresponding with the wound. No change whatever was made in the apparatus as first applied until the end of two weeks, when it was thought advisable to remove the back splint to see if it offered any obstruction to the free exit of matter. This was easily done without disturbing the limb, but nothing being found amiss, instead of returning the

splint, broad bands of muslin were substituted, and they answered every indication. The discharge from the wound at this time was healthy, and amounted to about two ounces in the twenty-four hours. Gradually it became less and less, until the end of six weeks after the injury the wound had all but closed, and the patient was removed from the apparatus. The union was firm, and there was about one half inch shortening. Coaptation splints were applied, and the patient was directed to keep quiet in bed. Two weeks later (eight weeks after admission), patient is allowed to go about the wards on crutches. Has never had any very serious symptoms, and is now in perfect health, though somewhat weak. A moderate amount of stimulants has been allowed almost from the first, and nourishing diet. It may be well to state that after the first two weeks the patient was in the habit of sitting up to his meals. In no other apparatus than the one used could this have been possible. The perfect ease, also, with which the wound could be seen and dressed, without disturbing the limb or the apparatus, is worthy of mention. This facility, however, is peculiar to the "Burge apparatus" only when the external wound is situated, as in the present case, at or near the middle of the thigh, and posteriorly.

JOURNALS FOR SEPTEMBER.

NASHVILLE JOURNAL OF MEDICINE AND SURGERY.—Sept.

ART. I.—Contributions to the Medical Flora of Nashville. By GEORGE S. BLAKIE, M.D.—Among the numerous medicinal plants met with daily by the country practitioner of the South and West the writer has mentioned some that are in a fit state for collection at the last of July and the first of August. The native anthelmintics are the spigelia marilandica, amygdalus persica, and the chenopodium anthelminticum. The common mullein (*verbascum thapsus*) is anodyne and antispasmodic, a decoction of the blossoms being better than the leaves. The wood sorrel (*oxalis stricta*) is antiscorbutic; its juice often forms a refreshing drink in fevers, and makes, when boiled with milk, a delicious whey. The fresh leaves are recommended as a salad in cases of scurvy, and also as a local application to scorbutic sores. The native antiperiodic is plentifully supplied from the different species of willow, and though not so reliable as quinine, is not so apt to cause congestion of the head. Among the most valuable astringents are the many species of oak (*quercus*), the use of which is well known. The persimmon (*dyospyros virginiana*) is astringent and tonic, used in sore throats, intermittents, and dysentery. The inner bark is officinal. The blackberry (*rubus villosus*), the smooth sumach (*rhus glabra*), and the common stinging nettle (*urtica dioica*), are well known astringents. The latter is also pectoral and diuretic, and used in decoction for nephritis, gravel, and hemoptysis. Horsemint, peppermint, and spearmint, are among the carminatives. As demulcents he mentions slippery elm (*ulmus fulva*), and ginseng (*panax quinquefolium*). The elder tree (*sambucus canadensis*), the pleurisy root (*asclepias tuberosa*), smilax, sarsaparilla, and spice wood (*laurus benzoin*), are mentioned as diaphoretics, and the plantain (*plantago major*) and dandelion as diuretics. The emetics are bloodroot, the pokeberry, lobelia, and western dropwort or Indian physic (*gillenia stipulacea*); cathartics, the American senna, podophyllum peltatum, convolvulus panduratus, ricinus communis, indigo-broom (*baptista tinctoria*), and the butternut tree (*juglans cinerea*); various stimulants, narcotics, and tonics, are also mentioned. ART. II. Psychology. By DR. B. H. WASHINGTON, Hannibal, Mo.—The writer attempts to prove the truth of phrenology and psychology by the teachings of scripture. ART. III. A Case of Chorea. By DR. B. F. BRETTAIN, Limestone, Tenn.—The case was at first treated by cupping over the tender vertebrae, followed by a dose of calomel and rhubarb, afterwards carbonate of iron and quinine. The patient growing worse, he was ordered drachm doses of carb. iron after each meal, six grs. sul. zinc twice a day, and the daily use of the

cold bath, the bowels being kept open with simple aperients. Under this treatment the improvement was rapid. ART. IV. *Medical Ethics*. By DR. EUGENE W. HERNDON.—The author considers it a breach of ethics for a practitioner to establish himself in a neighborhood where a sufficient number are already located. ART. V. *A Letter to the Editor from Dr. E. L. McTear*, of Bainbridge, Geo., relating a case of irritative fever with severe headache, successfully treated with whiskey toddy in teaspoonful doses, often repeated, after other means had failed to afford relief.

THE SAINT JOSEPH MEDICAL AND SURGICAL JOURNAL.—Sept.

ART. I. *The Recuperative Power*. By G. L. MILLER, St. Joseph. ART. II. *Inaugural Address before the St. Joseph Medical Society*. By DR. W. L. HEDDENS, President.

THE JOURNAL OF MATERIA MEDICA.—Sept.

ART. I. *Indigenous Tonics*. By CHARLES A. LEE, M.D. The ninth number of a series of articles on the materia medica of this country. ART. II. *Apocynum Cannabinum (Indian Hemp)*. The root is the only part employed in medicine. It acts as an emetic, purgative, sudorific, and diuretic, and is well adapted to the treatment of tonic dropsy. The fresh juice has been employed externally in cutaneous affections.

THE BRANDY TREATMENT IN ACUTE DISEASES.—A London correspondent of the *Wiener Medicinische Wochenschrift*, No. 26, in treating of the prevalence of Dr. Todd's treatment of acute diseases in London, expresses his opinion that it might be introduced with great advantage in Germany; for, although practitioners are there beginning to learn not to enfeeble their patients by blood-letting, they do not administer support to the nervous power in acute disease; so that, while they do not do so much harm as heretofore, they still do not do so much good as they might do. He admits, however, that Todd carried his stimulant treatment somewhat too far, especially at the commencement of acute affections, when there is no loss of power. At a later stage, however, no doubt can exist that the systematic administration of alcohol is attended with the best consequences; alcohol being, in Todd's view, not a medicinal agent, but a nutritive aliment of the nervous system. In the convalescent stage of typhus, as well as in the second and third week of this disease, and in many cases of pneumonia, the systematic administration of brandy saves many a life. An anecdote, illustrative of this subject, is told by Skoda. A peasant suffering from pneumonia was given over by his attendant as hopeless. A notary was summoned to make his will, and many of his friends attended. While waiting for the official, some strong schnapps was passed round to the guests, and the dying man with feeble voice implored a glass from the well known bottle. A refusal to one doomed to death could not be given; but the patient, finding himself so much better after the first glass, speedily repeated so agreeable a medicine, which soon effected a recovery, in vain attempted by pill and potion. The correspondent adds, that the assistant-physicians of the London hospitals manifest a remarkable predilection for this brandy treatment, exhibiting it even where their seniors have expressly countermanded it. "I have known many cases in which one of the most distinguished hospital physicians, desirous of experimenting upon the treatment of typhus and pneumonia, has positively forbidden a drop to be administered. The patient becoming worse towards evening, the assistant-physician has been sent for, and finding the case urgent, after in vain trying camphor, musk, etc., gives the patient brandy at short intervals, preferring to save life to obeying the orders which have been left. The symptoms yield, the patient sleeps, and in the morning, is twenty per cent. better. The physician arrives at nine in the morning, and proclaims the case to the pupils crowding around the bed as an example of the uselessness of the brandy treatment—not a single drop having been administered!"—*Medical Times and Gazette*.

American Medical Times.

SATURDAY, SEPTEMBER 29, 1860.

THE DUTY OF THE STATE TO THE INSANE.

In a previous number of the *MEDICAL TIMES* it was stated that three different modes had been proposed for relieving the present condition of the insane poor. The first was to increase the number of asylums, so as to accommodate all the insane; where the recent and curable cases, and the old and incurable, should be indiscriminately received. The second was, to reserve the present asylums as Curative institutions, and erect new State asylums for the incurable. The third was, that the present asylums should be kept as Curative institutions, and the counties required to make provision for the care and safe keeping of the incurable, under suitable supervision by the State. Some of the objections which have been made to the first two plans were stated; it only remains to consider the last.

It is well known that several of the more populous counties, either from the absolute necessity of providing accommodations for patients returned from the State asylum as incurable, or from motives of economy, or both, have erected county asylums, some of which are well constructed, and furnishing suitable accommodations for the class of patients for which they are designed. Other counties will no doubt follow the example, and such counties would be very reluctant to abandon their own institutions, and send all their patients to State asylums. Where the counties are small and the population comparatively limited, several adjacent and neighboring counties should, under suitable advice or law, unite in establishing an asylum for Incurables. Under a proper system of general supervision, there can be no doubt that this class of persons would enjoy all the care, security, and comfort, which their unfortunate condition admits; and that, at a much less expense than by paying for their support in a State institution that should be adapted for the curable as well as the incurable insane. We desire to state in this place, however, that when we speak of incurables, we refer to all those classes of the insane, demented, or epileptic, that should be under constant medical and legal surveillance, and that would not, under existing arrangements, be provided for in the State asylums. Experience has shown, in the European institutions for incurables, that a few may recover, and that the great majority will, under suitable management, become considerably improved. Truly says Dr. Langemann, the great friend of asylums for Incurables in Prussia,—“God only knows who is incurable.” But as regards the importance of having well-constructed and efficiently-managed institutions for this class of the insane to which we have referred, there can be no doubt; and we should insist upon every requisite condition of comfort, safety, and general good management. The present condition and management of the insane poor, particularly the incurable, in many of the almshouses in our land, are positively disgraceful and inhuman; and as we have stated in a former article, the State must exercise some supervision over the care and management of this class, whether curable or incurable.

The reasonableness of such a supervision, and the duty of the State Legislatures in reference to it, must be obvious to every intelligent citizen. In a future number we shall endeavor to describe, from authentic observations, the actual condition of the Insane Poor in our country, but as an apt and familiar illustration of the criminal neglect of the insane in our almshouses, we cannot forbear quoting an item that appears in the morning papers the very day of this writing:

(From *The World*, Sept. 22.)

"*An Insane Woman Roasted Alive.*—On Thursday an insane woman, named Elizabeth A. Brush, was burned to death in one of the shanties in which the poor of the county of Sullivan are kept. A person who was passing was attracted to the building by screams and groans, and on entering found it enveloped in smoke and flames, and the wretched woman in the centre of the room, literally roasting alive. Her clothing was nearly burned from her body. How the fire originated is not known, as there was no fire in the room which she occupied. The fire was extinguished as soon as possible, but the unfortunate creature expired in a few hours in great agony. She was a daughter of the late James Brush, of Monticello, Sullivan county, and was supported in the County house by her relatives."

What a spectacle! And who is answerable? Because there was no fire kept in that cold shanty, are the county officials and their superintendent of the pauper barracks to plead not guilty of that shameless neglect which allowed Miss Elizabeth A. Brush to be destroyed—perhaps by her own act—in that miserable hovel that invited the flames by which she perished? Perhaps, in the dramatic words of Joanna Baillie, this unhappy lunatic had exclaimed in vain:—

"Come, madness! come unto me, senseless death!
I cannot suffer this! Here, rocky wall,
Scatter these brains, or dull them."

And, being unguarded, fire became the ready agent of her death. Yet such a fate might well be preferred to the pitiable condition of hundreds of the insane poor now in the almshouses of the Empire State. Here, within two hours' ride from our city, that unfortunate woman, the daughter of well-known and respectable parents, was kept in a *shanty*—which naturally became her funeral pyre. In such asylums, and with no proper supervision, we could expect no better results.

It might be supposed that the supervisors or other responsible county officials would watchfully attend to the interests of the poor; but, said Senators Bradford and Lee, in their report to the New York Legislature, in 1857,—"In many instances the committee learned that the poor-houses had not been visited by the supervisors for more than a year. They cannot but regard this as a gross neglect of public duty, and therefore submit it to public criticism and to such legislative interference as may effect a more efficient supervision." Intelligent and faithful supervision of asylums that shall suitably accommodate the several counties, and at the same time equally conduce to the welfare of the insane poor; and promote economy of administration, in which each county is particularly interested, are now the great objects to be attained. The present movement on the part of some of the more populous counties to provide for their own insane must be either an advance or a retrogression from existing arrangements; and its ultimate results will manifestly depend mainly upon the character of the general law and supervision which the State shall provide. The counties will doubtless enter very cordially into any well devised plan by which they may have the

financial control of the proposed local asylums, and the State should make it the imperative duty of the counties to provide suitable buildings and care for their insane poor. The details of a suitable law for this object could readily be framed upon a basis that would be satisfactory to the counties. But when such a law is prepared, let it be so definite, simple, and strong, that it cannot be abused or evaded. And by all means should there be a separation of the incurable from the curable and recent cases of insanity—the latter class being transferred to the State Asylums.

This classification is indispensably important. In the State of Massachusetts, the County Asylums have been generally given up. Those asylums received all classes of the insane poor, and were under no effectual supervision and control of the State. In the year 1855 the Commissioners of Lunacy advised the repeal of the law of 1836, by which those local institutions had been called into existence, and which the commission declared had, in all the counties, failed to answer its purpose." And such inevitably would be the unhappy result of any law that should authorize the respective counties in any state to provide for all classes of the insane, both the curable and the incurable, whatever the supervisory care of the State; and even for the success of local Asylums for the incurable insane alone, effectual supervision by a State Commission of Lunacy will be found necessary. It should be the duty of such Commissioners to examine into the conditions of the insane wherever confined, and to report annually to the Legislature. Persons who were qualified for the situation could do much by their advice to the county authorities, in the selection of sites for the local asylums, in the construction of the buildings, and in the general management of the patients, in addition to their particular duties to see that patients were not improperly confined or abused. We are here recommending no new or untried experiment. In England, after a long series of experiments by appointing visiting committees, local managers, etc., it was found impossible to remove or prevent abuses, until the State took the matter into its own hands, and appointed a board of commissioners—a certain number of whom were denominated Acting Commissioners, whose duty it was to visit all the asylums—private as well as public, almshouses, and every place where insane persons were confined. This inspection was not to be partial or superficial, but they were required to see personally and examine into the condition of each individual patient.

Although we have the successful example of England to guide us, we would not recommend hasty or inconsiderate legislation. But it is believed that the time has arrived when the great State of New York should adopt some fixed and comprehensive system for dispensing its charities, and also for the proper supervision of the insane. Moneys are granted every year in large amounts to the different benevolent institutions. This, no doubt, is right, but it would certainly be the part of wisdom for the Legislature to be informed of the condition and claims of those several institutions, and know how the money is expended. The plan which we would propose, is, that the Legislature should appoint a Board of Commissioners, two or more of whom should be termed acting members. It should be the duty of the acting members of this commission; 1st, annually or oftener, to visit and examine personally the actual condition of the insane wherever confined or provided for in the State; 2nd, to report to the next and every subsequent

Legislature the condition of the insane in the several asylums and places of confinement; 3d, to propose such comprehensive and specific plans as to the Commissioners seem to be required to properly meet the necessities of the insane, and the interests of the State and of the several counties. Probably, also, it would be expedient for the Legislature to authorize this Commission to exercise some surveillance over all the eleemosynary and benevolent institutions of the State, as recommended by the Senate's Committee on the Charities of the State, as reported to the Legislature of New York in the year 1857.

It will be recollected by the members of the medical profession who were in attendance at the New York State Medical Society last winter, that this subject was brought before that body, and a resolution unanimously passed to petition the Legislature to appoint a Commission of Insanity. The petition was presented, and a bill was reported by the committee, in accordance with the petition. But it was too late to obtain action upon it by such a Legislature. The present condition of the insane appeals strongly to the benevolent of all classes, but more particularly to the medical profession. If but one physician in every Assembly district would make it a point to see the member who is elected to the Legislature from his district, and urge upon him the importance of this measure, it is believed there would be no difficulty in procuring the desired action of the State. Or, if each county society, in accordance with the example set by Oneida county, would appoint a special committee to attend to this matter in their own county, the proper influences would be brought to bear in season upon our Legislators, and ere another year had passed, the State of New York might be redeemed from the disgrace which now attaches to it on this subject.

In all our remarks upon the care and treatment of the insane, we have assumed that the positively intractable and incurable cases should be separated from the recent and hopefully curable. The vast practical importance of introducing this improvement is acknowledged by a large majority of physicians connected with lunatic asylums. Wherever the improvement has been introduced it has proved eminently satisfactory, and truly economical. In Prussia, where the subject of insanity is more thoroughly understood and better provided for than in any other country, there are no less than fifteen asylums for the incurable and the demented. The character and management of those institutions happily shows that they are well provided with every facility and means that can conduce to the recovery of any inmate whose mind is not hopelessly beclouded. And such should be the local asylums recommended in the foregoing remarks. We are aware that Dr. Kirkbride of Philadelphia, and some others, have discouraged the organization of this class of institutions; but they have become a necessity in some of the States, and if we would make them like the asylums at Dusseldorf and Andernach, we must look well to the general law under which the proposed local institutions shall be organized, and to the system of supervision that shall be exercised over them. Then will even the most hopeless classes of the insane, the demented, and the epileptic, who now crowd our almshouses, be provided with constant medical supervision, and surrounded by all the hygienic and moral influences that an enlightened humanity can suggest to minister to their comfort, safety, or improvement.

THE WEEK.

THE sale of Poisons, and the practical value of the recent legislation on the subject, continue to elicit such opinions, pro and con., as lead us to entertain the opinion that doctors differ much less than some other persons. That poisons should be retailed only upon the prescription and order of a physician, except under the most guarded provisions against their criminal or improper use, all right-minded physicians admit. A few weeks ago, when the new law was discussed and its observance urged by the Academy of Medicine, some evil-minded person undertook, through the medium of the Daily Press, to satirize and ridicule the discussion and action of the Academy on this subject. But we are happy to notice that the press is now unitedly and strenuously advocating the strict observance of the new statute relating to poisons. Says the editor of the *New York Times*, of this statute:—

"There is, at the present moment, on our statute-book a law which, if properly executed, would prevent, as far as it is in the power of law to prevent, the careless sale of poisonous drugs. This act requires that the poison shall be properly labelled, and that it shall only be given under the prescription of a regularly authorized physician, or in the presence of a witness to the transaction. Beyond this it is impossible to go. A resolution passed by the Pharmaceutical Convention aims at a new law which would define who are 'regularly authorized physicians,' and would limit the sale of drugs generally to honest and trustworthy men. It is clearly impossible to attain such an end. . . . All we need is that the law now on the statute-book shall be faithfully executed, and that culpable carelessness in the sale of poisonous drugs shall meet with the certain punishment that it merits. When this is effected, legislation will have done all that it can do to protect life from being sacrificed by the indiscriminate sale of poisons."

This is more confident language than we or the Academy of Medicine have uttered, and yet there is good reason to believe that, with slight amendments to the statute, this opinion will be sustained by experience. The list of poisonous drugs enumerated in the recent Act requires revision for additions and better definitions, and we think some of the conditions for the sale of particular articles might be advantageously modified. But, as we have said before, it is a wonder that so good a law as this should have been placed upon the statute books by the last Legislature of New York. Upon inquiry we have learned that this important measure may be credited to the two honest men in the respective branches of that body, viz., Hon. F. E. Rotch, the distinguished agriculturist, from Otsego, and Hon. P. Murphy, the good physician, from Niagara.

The public may safely allow the Act to remain unaltered, for reasons quoted above from the *N. Y. Times*; and if any amendments are desirable, let them be suggested by the American Pharmaceutical Association's trustworthy committee, and the joint committee which has been appointed by the Academy of Medicine. The recent discussions in the Association, the Academy, and the Sanitary Convention, on the sale of poisons, have revealed the fact that the attention of both Druggists and Physicians needs to be aroused to an intelligent consideration of the subject. Let our present law remain unaltered and be faithfully observed, until Messrs. Proctor, Colcord, Squibb, and the Academy's Committee, can suggest and procure such amendments as may be desirable.

It is now upwards of sixty years since the fact was settled beyond cavil that the scourge of the human race, small-pox, was eradicable. It was proved to a mathematical demonstration that vaccination with cow-pox, a process perfectly innocuous to the individual, would insure exemption from this most infectious and contagious disease, or so modify its malignant properties as to render its attacks almost harmless. Enlightened continental nations, over which this terrible plague, at given periods, spread like a pall of death, decimating towns and rural districts, seized the proffered boon as of Divine appointment. By systematic vaccination, enforced by Government, the people have received such complete protection from small-pox, that in many large districts and populous towns a case has not been known for a quarter of a century. Will it be believed that there is a community, or even an individual in the civilized world, that has not learned by what means perfect immunity may be obtained from this great destroyer! And yet it seems of a truth that in this sixty-first year of vaccination there is a town in Christendom, whose authorities have resorted to the primitive method of frightening people away from the unfortunate sick, as the only means of staying the progress of the disease. The following note appeared, during the last week, in one of our morning papers:—

SMALL-POX.—The Jersey City Common Council on Tuesday night directed that printed boards, with the words "Small-Pox Here," should be placed upon all dwellings where this disease exists.

Jersey has been facetiously called a foreign state, owing to her backwardness in all improvements; but if this action of her authorities is a criterion of the general intelligence of the people, she may be safely ranked among the semi-civilized nations of the world. We suspect, however, that this is purely an act of the Common Council, as it is fully up to the level of the intelligence which characterizes the acts of such bodies the world over. We shall venture to communicate to the Common Council of Jersey City an item of scientific intelligence which, though more than half a century old, will doubtless have all the novelty of a last night's murder.

If, on the approach of small-pox to a populous town, the authorities would secure the services of several reliable physicians, and have thorough vaccination practised, the inhabitants of that town would enjoy perfect exemption from the disease.

By this means, and at less expense than to bury half-a-dozen of their dead poor in Potter's field, Jersey City could have been made as exempt from small-pox as though that disease had never existed in twenty-four hours.

A CORRESPONDENT of the *London Lancet*, attached to the army of Garibaldi, writing from Messina, Aug. 17, says:—

Pray draw attention to the fact that we are much in want of quinine, instruments, shirts, towels, linen of every description, pillows, etc., for we are in a desperate state of need. I wrote that we are losing two per day, but it is rising very rapidly; and the poor volunteers are packed like herrings in the hospitals, or rather in holes of stench and filth, without pillows, sheets, or anything. We are setting out upon a campaign without an ounce of quinine, in a marshy district, and without a sharp knife.

These appeals to the medical profession of England have found repeated and liberal responses in the transmission of material aid. We are not aware that the medical profession of this country have contributed anything, as a body,

to the aid of Italian independence, and yet the great body of American physicians, in common with their fellow citizens, must keenly sympathize with the efforts that are being made to secure that object. In the present emergency they are called upon to give tangible expression to that sympathy. We could wish that the medical profession of this city would initiate a movement by which their brethren throughout the country could contribute towards the relief of the sick and suffering soldiers in the army of Garibaldi. There is an Italian committee of the Garibaldi fund in this city which would aid in carrying out the object of such a movement.

A correspondent of the *Boston Medical and Surgical Journal* furnishes the following translation from "the Journal of the Proceedings of the Imperial Society of Physicians at Vienna, of which PROF. ROKITSKY is President, and which is read in every city of Europe." The letter is dated Erie, Penn., N. America, 5 May, 1860, and is characterized by the same ignorance and low-breeding as the letter which appeared in the *Journal of Medicine*, some months back, translated from a leading German periodical:

"Sixteen years ago there came a barber here, Carl Brandes by name. At first he starved, then inoculated an English lady with the small-pox, was sentenced to a fine of 1800 dollars, escaped to California, returned with a heap of gold, paid the trifle, and is now allowed to be the richest and most skilful doctor here, although he has no knowledge of percussion, auscultation, and many other things. As a specimen of his knowledge, he still treats scabies by internal remedies. Besides him, there flourished here, last October, twenty-four other doctors, at which time I arrived here, and began my Vienna practice with much success. The inhabitants of the city are two-thirds Germans; the other third consists of Yankees, Indians, and Negroes, the latter being mostly fugitives from the Slave States. Day before yesterday I delivered a 14-year old negro girl, and to-morrow the family, consisting of sixteen souls, departs for Liberia, where each one will receive one hundred acres of land. German physicians make money here very fast, if they understand their 'business' and English. Each one has his own medicines, for a knowledge of which I am indebted to Herr Dr. Prof. Schroff, and Herr Apothecary Endlicher at the St. Ulrich, of Vienna. Our midwives here are a combination of ignorance and stupidity; the Yankee doctors, however, surpass everything in trickery and activity, for as soon as one of them has been guilty of anything extraordinarily outrageous, away he runs. More than one hundred patent medicines are puffed in the newspapers, and sold here. A great business is done by the sellers of worm-medicines, which is due to the frequent occurrence of worm-diseases here, where it is no rarity for a child to carry about with itself twenty to twenty-six *ascarides lumbricoides* half a foot long. For an ounce of santonine I am obliged to pay one dollar. The oculists generally travel about the country, and shortly since an individual by the name of 'Charles von Heintye,' from Berlin, arrived here with a little electrical apparatus from Buffalo, where he had studied with Prof. Griswold, who five years ago was working upon a railroad. In Buffalo street one may read 'R. Stoll—Deutscher Dogter.' This man was formerly a shepherd in Meiningen, and has certainly forwaded more into the land of the hereafter than ever the world-renowned old Anton of the Leichenhaus at Vienna saw dissections. He possesses the seventh book of Moses, looks at the urine, and gives, generally, three bottles of medicine at once. He loves me no better than German orthography; for, by way of a joke, I sent him the urine of my Tom. He examined it, and said, 'This man is very sick;' while that very day the good horse had gone with me to Waterford and back, a distance of thirty miles.

Since then the 'Deutscher Dogter' drinks more whiskey than ever. A month ago I became acquainted with the great Indian Doctor Jakson, who used to be a clerk in a store, and now wears a beard like the Zouaves, whose personal acquaintance I was obliged to make last summer in Italy. At every place he changes his name and dress, like a chameleon. He had given two ounces of the tincture of belladonna to a phthisical patient, and you may well imagine with what symptoms the miserable man came to his end. When I was summoned, and called the 'Indian' to account, he drew a revolver, so that I was obliged to call for help to escape, and to put him out of the house. Since then, he is no more seen in our city. In Rochester, a quack by the name of Hang delivered a child with a rope. The head was torn from the body, and Dr. Hang now sits in prison. He confesses, indeed, that he never studied, but says he learned a good deal from books. Last week there came to me a farmer from Fairview. It was a real 'clinical' case of *ozæna syphilitica*. The 'most skilful' doctor here had prescribed for him all sorts of snuff for two years, till finally his nose fell in like a tent in a storm. No one suspected syphilis. A Dr. Leichmann, of M., gave forty-five grains of calomel in pneumonia, a short time since. This communication will perhaps interest Oppolzer and Skoda. The patient, who took this dose three times, recovered, to be sure, but lost all his teeth. Setons and issues I found here upon the most delicate ladies, and every respectable patient wears blisters of all sorts. On the other hand, no leeches are used. I impart these facts for the edification of the German medical world, and stand responsible for every word."

We are informed that the statement from which we gathered the facts in regard to the troubles in the MEDICAL COLLEGE OF OHIO, was entirely ex-parte; that Prof. BLACKMAN was sustained by both Boards of Trustees, being re-appointed to the Chair of Surgery by each; and finally that the present organization of the Faculty is considered the strongest that has existed for several years.

Reviews.

A PRACTICAL TREATISE ON THE DISEASES OF THE LUNGS, INCLUDING THE PRINCIPLES OF PHYSICAL DIAGNOSIS. By W. H. WALSH, M.D. A new American from the third revised and much enlarged English edition. BLANCHARD & LEA, 1860.

The booksellers rate this work at a high figure because it has sold well. We would not undervalue this sort of mercantile success which conveys to the author, in addition to the *aliquantulum ad rem*, the flattering assurance that the public finds his labors useful. This hungry public is not fastidious. It does not care to pay for elegance or novelty, but it wants a great deal for its money, and demands that the whole amount of pabulum should be solid and nutritious, and in such form that it can be bolted in haste, assimilated and made ready for use in the shape of practical knowledge of the last fact out before the next steamer can arrive to contradict it. This book is just the thing for Dr. Busypill to cram, standing with his hat on in the restaurant of Messrs. Bibliopole and Hungerbit. At this late day, the critic's occupation is gone; not for him now is the pleasing office of bespeaking interest or predicting success. Success is an accomplished fact. Were it necessary, the reviewer might easily consider it, from an historical point of view, and venture to explain by what excellent peculiarities this treatise has achieved popularity while the labors of other

painstaking patient writers have been overlooked or forgotten. But this is not our purpose.

Those who have read the book, know that much of the literature of the subject of auscultation has passed under the eye of Dr. Walshe, and that he has judiciously selected and clearly arranged his materials. They have noted this by dividing the four hundred and fifty-eight pages of his book into nearly two thousand numbered paragraphs. He has indexed the whole subject so precisely that what is wanted can be found as readily as the author's name in the Medical Register. We do not doubt that they have appreciated the soundness of the doctrine which bases therapeutics upon something else than the apparent morbid anatomy—which takes into account the diathesis, the essence of the malady—which does not regard bronchitis as defined when stated to be an inflammation of the mucous membrane which lines the bronchial tubes [vide pp. 182, etc.]. We have never seen men who would pronounce the pustules of variola and those produced by an inunction of antimonial unguent to be specimens of pathological anatomy belonging to the same family, but we have known many to write and talk of the pneumonic inflammations as if they were all identical. This Dr. Walshe does not do.

We were glad to see that he had read with satisfaction Dr. Austin Flint's excellent books, and sorry to see that he considers as valid some hyperthetical objections to Dr. Cammann's binauricular stethoscope which clearly, the context shows, he has never tried to make use of. To those who have never seen the book at all we say, if there be any thing which you want appertaining to a treatise on the diseases of the lungs, and cannot find elsewhere, you may look for it with confidence in the work now before us—for this includes notices more or less compact of all the ordinary topics and more besides, such as cirrhosis of the lung—treatment by the compressed air-bath, the effects of the different climates, choice of residence, etc. In short Dr. Walshe's Treatise on the Diseases of the Lungs is a book eminently fit for counsel to the young; and as a book of reference for the experienced, has not been excelled.

C. F. H.

THERE are 12 city-brokers in London, expressly devoted to tobacco sales; 90 manufacturers, 1,569 tobacco shops, 7,380 workmen engaged in the different branches of the business, and no less than 252,043 tobacco shops in the United Kingdom. And if we turn to the continent, the consumption and expenditure assume proportions perfectly gigantic. In France much more is consumed, in proportion to the population, than in England. The emperor clears 100,000,000 francs annually by the government monopoly. In the city of Hamburg 40,000 cigars are consumed daily, although the population is not much over 150,000; 10,000 persons, many of them women and children, are engaged in their manufacture; 150,000,000 of cigars are supplied annually; a printing press is entirely occupied in printing labels for the boxes of cigars, etc., and the business employs £400,000,000 or \$20,000,000. In Denmark the annual consumption reaches the enormous average of 70 oz. per head of the whole population; and in Belgium even more—to 73 oz., or 3.6 lbs. per head. It is calculated that the entire world of smokers, snuffers, and chewers consume 2,000,000 of tons of tobacco annually, or 4,480,000,000 lbs. weight—as much in tonnage as the corn consumed by 10,000,000 Englishmen, and actually at a cost sufficient to pay for all the bread corn in Great Britain. Five and a half millions of acres are occupied in its growth, the produce of which, at two pence per pound, would yield £37,000,000 sterling, or \$185,000,000.

Progress of Medical Science.

MATERIA MEDICA AND PHARMACY.

BY EDWARD R. SQUIBB, M.D., OF BROOKLYN.

Malpractice.—"If the whole materia medica, as now used, could be sunk to the bottom of the sea, it would be all the better for mankind, and all the worse for the fishes."

If all the wit thus used could be sunk to the bottom of the sea, it might be all the better for mankind, though none the worse for the fishes, because the fishes would be likely to decline the wit, though good, as being improperly applied to their cases. Let those who fail to discriminate between uses and abuses be impartially tried; and let it be remembered in evidence, that wit, equally with ignorance and arrogance, may obtain currency as wisdom, whilst the proverbial protency of wit places it far beyond the others in influence for good or evil.

Iodide of Iron and Cod-liver Oil.—M. Gille, a Pharmacist of Paris, some time ago established the fact that iodide of iron was soluble in fatty matters, and M. Devergie, of the Medical Staff of the Hospital Saint Louis, has more recently published a formula for its solution in cod-liver oil. (See *Répertoire de Pharmacie* for 1860, t. xvii. f. 29.) This, however, is a new preparation of fixed ratio between the constituents, and aspires to the rank of a new remedy under a new and complex name. The remedies being both old, and their association in the same cases not new at all, the only fact now to be learned is that physicians may dissolve the iodide in any desired proportion in the cod-liver oil, and may thus conveniently give them together by extemporaneous prescription, free from the semi-quackery of fanciful bottles, gilt labels, etc. The educated pharmacist who puts up such prescriptions will of course know, that the solution must be either filtered or poured off from the small sediment of sesquioxide of iron constantly found even in well prepared dry iodide of iron.

Cultivation of Cinchona in Java.—It appears from recent statements in Holland that not only does the cinchona tree grow and flourish in the island of Java, but that the bark of these trees really yields some four per cent. of cinchona alkaloids. Whether this yield be the result of a single select specimen, or of an average bark product, Dr. Debrij does not mention. Neither does he give the proportion that quinia bears in this four per cent. of alkaloids. Assuming the statements to be practically accurate, there can now be but little doubt that Holland will soon open a new source for this valuable product, and add much to the facilities for obtaining good salts of quinia.

The Imperial Society of Zoological Acclimation of France now offers a prize of 1500 francs for a successful attempt to acclimate the cinchona tree in France or in any of the mountains of central Europe.

Anæsthetics.—The *Gazette Medicale de Lyons* states, that after devoting two sessions to the important subject of anæsthetics, the Imperial Society of Medicine of Lyons arrives at the following unanimous conclusions.

That ether employed to procure surgical anæsthesia is less dangerous than chloroform.

That the anæsthesia obtained by ether is as complete and as constant as that by chloroform.

That if there be inconveniences attendant upon the use of ether that are not encountered in the same degree by the use of chloroform, these are of but little importance, and do not compensate the increased danger inherent to the chloroform. That in consequence ether should in general be preferred to chloroform. An additional motion that by vote of the Society a charge of presumptive imprudence should rest against any one who, in future, should use chloroform when he might have used ether, was lost.

Stramonium a Remedy for Hydrophobia.—Bouchardat mentions (*Répertoire de Pharmacie*, t. xvii. f. 86) on the

authority of Père Lagrand, one of the oldest and most venerable of the missionaries to Tonquin and Cochin-China, that a decoction of a handful of stramonium, given at once, has been successfully used in the treatment of hydrophobia in these countries. It is said to produce a short but violent access of the disease, after which the patient gets well in twenty-four hours. M. Bouchardat thinks this indefinite practice hazardous, and would prefer the measured administration of atropia by the hypodermic method.

Potassæ Chloras.—In a paper read before a section of the National Medical Association of New Haven, Dr. Fountain, of Iowa, advocated the use of Chlorate of Potassa upon both theoretical and practical grounds; supposing that it furnished oxygen in a nascent and most active condition in tuberculosis and in all other diseases of obstructed respiratory process. His idea appears to be that want of proper oxidation of the blood in the lungs is the chief cause of the progress of tubercular phthisis beyond a certain point, and that the deficient proportion of oxygen may be furnished through the agency of this salt. The chemical objections to this theory are, that chlorate of potassa is not likely to furnish oxygen under the action of any known chemical law, within the living economy. If decomposed at all, it is not probable that nascent oxygen and chlorate of potassium are the results. As actual practice, however, must decide upon the value of the suggestions of theoretical reasoning, it is to experience alone that such points can be legitimately referred. There appears to be good reason to believe that the administration of chlorate of potassa in the cyanosis met with in the last stages of fatal pneumonia, and in the same condition wherever met with, wherein suffocation appears to be imminent through want of proper aeration of the blood, is often so useful that its effect cannot be mistaken. But its rank as a remedy in phthisis is by no means so well established. Dr. H. S. Smith, of Brooklyn, following up the suggestions of Dr. Fountain, has applied it in a few cases of incipient but confirmed tubercular phthisis, wherein the diagnosis was simple and easy, and the symptoms characteristic and prominent. In all the cases the disease was progressing steadily, but neither of them had reached the stage of softening. Each patient took half an ounce of good chlorate of potassa every twenty-four hours, one during a period of four weeks, and three for nearly three weeks each. The salt soon produced a disgust and loathing of it in all the cases, and this increased to the extent of apparently impairing the appetite for food. Beyond this no other effect of the remedy could be detected, either good or bad, by any ordinary mode of observation.

Liquor Ferri Persulphatis.—This chemically imperfect persulphate of iron, introduced as a new remedy by Monsel of Bordeaux, has recently had some important new applications which add to its character as a most useful astringent and styptic. Its chief point of value appears to be the absence of corrosive caustic, or even irritant effect in application, and in this it prominently differs from all the other powerful astringents and styptics; whilst its power of coagulating and radically changing the animal fluids, and of constringing and condensing the animal tissues, is equal to if not beyond that of any other agent hitherto applied for such purposes. The late Dr. Isaacs used a dilute solution successfully, by injection, in two very obstinate cases of gleet, after all ordinary modes of treatment had failed. It succeeded in six weeks, after an unsuccessful though well directed treatment of many months. Dr. A. N. Bell, of Brooklyn, used it to arrest the hemorrhage after operation for fistula in ano, and availed himself of the adherent coagulum formed to separate the incised surface during cicatrization. It subserved the purposes of the ordinary pledget of lint conveniently and well, and avoided the usual displacement and renewal consequent upon the use of lint. Dr. H. S. Smith, of Brooklyn, used it by injection to an external incomplete fistula in ano, with the effect of a solid cicatrization of the walls after a single application. He also used it, but without success, as an hæmostatic in a case of hemorrhage from the gums after the extraction of a num-

ber of teeth. Dr. Hamilton, of Brooklyn, used a dilute solution as an application to weak, flabby granulations, with the same success that attended the application of solution of nitrate of silver in the same case.

PHYSIOLOGY AND HISTOLOGY.

By WM. H. THOMSON, M.D.

1. *Animal Electricity*.—M. Matteucci, one of the most distinguished names in electrical science, in a memoir presented at the sitting of the French Academy, Aug. 6, 1860, relates some interesting experiments on the electro-motor power of the organ of the torpedo, which prove that this power, sufficient to produce a constant current which will keep the needle of the galvanometer deflected from twenty to thirty hours, exists independent of the action of the nervous system. Two torpedoes, which had been kept in sea water for fifteen hours after they were caught, were placed in a tin box, which was then deposited in the midst of a large block of ice. Every two days the box was taken out to test the electro-motor power of the organ. After two days the deviation of the needle was almost as great as in a living torpedo. After four days it yet gave a constant deviation of from 50° to 60° , and it was not until after eight days that it was reduced to 5° or 6° , and then the course of the current was the same as at the beginning, which is also that of the instantaneous discharge. By another experiment, M. Matteucci proves also that the electro-motor power augments, and that this augmentation persists during a certain length of time by exercising the organ. Two pieces of the electric organ, of the same size and from the same fish, were placed together, so that the dorsal surfaces lay in contact. If then one of the pieces be pricked with a pin, or better, one of the small nervous filaments of this piece be struck with the end of a pair of scissors, it will afterwards be found, on completing the galvanic circle between the two pieces, that their currents are not equal, but that the one which has been excited, has acquired an electro-motor power much stronger than the other, which lasts for a certain length of time. A fact analogous to this he has found in the electro-motor power of muscles, but there are several contrasts in this function in muscles, and in the electric organ of the torpedo. In the former there are set up active chemical processes which charge the substance itself of the muscle, and the composition of whatever gaseous medium it is in, while, at the same time, heat and mechanical force are produced; but in the electric organ he has proved, by the most delicate tests, that no heat is disengaged nor is any chemical change effected in anything during the period of its activity.

2. *Chemical Researches on the Functions of the Liver and Pancreas*.—During the same sitting of the Academy M. De Luca reported the result of his analysis of a portion of liver, and certain fatty matters found in the right heart and vena cava inferior of a patient who had died with an atrophied pancreas. From the liver both glucose and glycogenic matter, in all respects the same as found by M. A. Bernard, were obtained, clearly establishing that the disease of the pancreas had not sensibly modified the glycogenic function of the liver. The fatty matters, on examination, showed no evidence of free fatty acids, or of having been saponified or otherwise chemically decomposed. This want of being acted upon could, from what precedes, be only attributed to the disease of the pancreas. M. Bernard, as is well known, having shown that in the normal state the pancreatic juice has the property of decomposing fats.

3. The subject of the *Reproduction of Bone* continues to attract the attention of physiologists, which it is well calculated to do from its important practical bearings. M. Flourens presented a paper for M. Borguet to the Academy, detailing the results of resections performed on three patients, in which not only repair, but reproduction of bone to a considerable extent, had occurred. One of the cases

was a comminuted fracture of the upper third of the humerus, complicated with a penetrating wound, in which the bone was reduced to a great number of irregular, angular fragments. The seat of the fracture was largely laid open, and the fragments removed, leaving the periosteum in its place, and then the whole was treated as a simple incised wound. Instead of the bone removed a soft and fibro-cartilaginous tumor was formed, which at a much later period became osseous. This new bone was shorter by two centimetres, but more voluminous and protuberant than the portion it replaced, but the movements of the shoulder were free in every direction, and the patient had perfect command over his arm. Another case was a resection of a portion of the clavicle for caries, including eight centimetres of the length of the bone, which was reproduced to the extent of five centimetres. Examined ten years after the operation, the new bone was harder, shorter, and thicker, and a little more irregular than the old bone, but was continuous without any apparent line or demarcation with either the original acromial or sternal fragments. M. Borguet maintains that to judge rightly of the results of such operations, they should be examined a long time after the cure, and he suggests whether the chain saw may not be used to detach the periosteum from the deep surface of the bone, where it is impossible to resort to other instruments.—(*Gaz. des Hôpitaux*, Aug. 14.)

M. Ollier continues his researches on this subject, and in the last number of the *Journal de la Physiologie*, Jan. 1860, he gives a very interesting account of his experiments on *Transplantation of Bone*. In the number for August 4, we have given an account of his experiments on transplantation of periosteum, but his success is no less marked in these cases also in which he has transplanted, 1. Bone taken from a living animal and placed in the midst of the tissues of an animal of the same species. 2. Bone taken from an animal dead for a certain length of time (in some cases for an hour and a quarter after death), and placed in the midst of the tissues of an animal of the same species; and 3. Bone taken from a living animal and placed in the tissues of an animal of a different species. The presence and integrity of the periosteum was the main condition requisite for the success of the experiment.

4. *Influence of the Nerves on the Color of the Venous Blood*.—In a communication to Du Bois-Raymond, H. Meyer mentions some experiments which show the influence of nervous action on the color of the venous blood. After section of the ischiotic nerve, the blood from a cutaneous vein in the neighborhood was at first still dark, but a few minutes later it issued with a bright red color, and continued to do so even after seven days. An analogous result was obtained from six other similar experiments. He states that as early as 1820, Krimer stated as the results of his experiments "that the bright red blood of the arteries passes as such into the veins, without becoming, during its passage in the veins, dark red, as soon as it is, by means of section or destruction of the nerves, deprived of the influence of the latter." These observations gain at present in interest through Bernard's discovery regarding their varieties in the color of venous blood of glandular organs, according to their condition of activity or rest.—*Brit. Med.-Chir. Rev.*, July, 1860.

5. *Effects of Artificial Watery Blood*.—In *Virchow's Archives*, vol. xvii., M. Hermann relates some experiments of watery injections into the jugulars of dogs, to test the researches of Kierulf, who found that this caused at first albumen and then blood to appear in the urine. Hermann found that by very great dilution albumen and hematin appeared in the urine simultaneously, whence he concludes that the albumen proceeds not from the serum, but from the blood globulin. Another interesting fact, serving to corroborate the suspected relationship of bile and blood pigments, was that biliary pigment always appeared in the urine after dilution of the blood, and also always preceded the hematin. The multiplication of facts of this kind affords grounds for hoping that before long the true relations of the

liver to the history of the red corpuscles will be cleared up. Some features of the pathology of purpura hemorrhagica, as also of anemia mercurialis on the other hand, have long suggested an important modifying function in the liver upon the corpuscular elements of the blood, which we can hardly believe, with some physiologists, is restricted to the destruction and breaking up of worn out red disks.

Reports of Societies.

AMERICAN PHARMACEUTICAL ASSOCIATION.

THE ninth annual meeting of the American Pharmaceutical Association was held at the University Buildings in the city of New York.

In accordance with the previous adjournment, the meeting was called to order at three o'clock P.M., Sept. 11th, by the President, Samuel Colcord, of Boston.

A Committee on Credentials was appointed, consisting of Mr. Gordon of Cincinnati, Maisch of Philadelphia, and Coddington of New York, who reported upon the several delegations, and afterwards read a list of persons who had been elected since the last meeting, and also offered the names of several as candidates for membership.

Messrs. Prestreux, Green, Maisch, Block, Gordon, Proctor, Squibb, and Tufts, were appointed as a committee to nominate officers for the ensuing year.

The report of the Executive Committee was next read by the Chairman, Charles T. Carney, of Boston.—Adopted.

The Committee on Home Adulterations offered their report, which was also adopted.

Mr. JOHN MEAKIM, of New York, offered the following:

Resolved—That a Business Committee be appointed to take charge of any recommendations or unfinished business, and offer suitable resolutions for the Association.

The President then read his annual address, in which were embodied many very useful suggestions relating to the future prosperity of the Association. It was listened to with marked attention by all present, and at its conclusion elicited applause.

The Association then adjourned until nine o'clock Wednesday morning.

SECOND DAY.—WEDNESDAY, SEPT. 12.

The meeting was called to order by the President; after which the minutes of the previous meeting were read and approved.

The Committee on Nominations offered the following report, which was unanimously adopted:

For *President*, Henry T. Kierstedt, of New York. *Vice-Presidents*, Wm. J. M. Gordon, of Cincinnati; Wm. S. Thompson, Balt., Md.; Theodore Metcalf, Boston. *Recording Secretary*, James T. Shinn, Philadelphia. *Corresponding Secretary*, P. Wendover, Bedford, N.Y. *Treasurer*, Henry Haviland, of Boston. *Executive Committee*, Wm. Proctor, jun., of Philadelphia; Charles A. Tufts, N.H.; James Balmer, Boston; Geo. W. Weyman, Pa.; James T. Shinn, Philadelphia. *Committee on Progress of Pharmacy*, John M. Maisch, Philadelphia; Charles T. Carney, Boston; Edward S. Wayne, Cincinnati; John Meakim, N. Y.

The President elect being absent, the First Vice-President, Mr. Gordon, took the chair.

On motion of Mr. Meakim, the following resolution was adopted:

Resolved—That invitations be tendered to Edward Delafield, President of the College of Physicians and Surgeons; John W. Draper, President of the University Medical College; John Watson, President of the Academy of Medicine; and the Honorary Members of the Association; the Professors and ex-Professors of the College of Pharmacy; the Members of the Academy of Medicine; N. Y. Pathological Society; and the N. Y. County Medical Society, be invited to attend the sittings of the Convention.

On motion of Mr. Weigand, the thanks of the Association

were voted to the President and active officers of the Association, for the able manner in which they had discharged their duties during the past year.

Prof. PROCTOR next offered a resolution to the effect, that a committee of five be appointed to prepare a list of questions to be answered by the various members next year. Messrs. Weigand, Green, Tufts, and John, were appointed on that committee.

Some of the questions proposed at the last meeting of the Association were then answered by various members; after which the meeting adjourned until three o'clock in the afternoon.

AFTERNOON SESSION.

The meeting was called to order by the First Vice-President. The Business Committee called up the following resolution, which had been laid on the table at the previous meeting:

Resolved—That a change in the constitutional provision as to the eligibility to membership introduced in the address of the retiring President, and since reported on by the committee to whom the address was referred, be referred to the meeting of next year.

Mr. PARRISH spoke in favor of the resolution, maintaining that it would be greatly to the interest of the Association to have an increase in the number of members; the annual income would then be greater, thus affording an opportunity for having a central office and salaried officer, who should devote his time to the interests of the body; then, again, the influence of numbers would be great when the Association demanded any legislative action in its behalf.

Dr. SQUIBB thought that the establishment of a third order of members would be productive of a great deal of harm, and that, instead of increasing the influence of the body in reference to numbers, by the admission into its ranks of eclectics, homeopaths, etc., the exact opposite would be the case. He was in favor, however, of referring the matter to a committee to report upon.

Mr. PARRISH did not wish to be understood as not insisting upon the qualifications for membership; they were, in his opinion, of primary importance. He was, however, in favor of enlisting in the organization every reputable apothecary throughout the country. In conclusion, he offered a resolution that a committee of five be appointed to mature the proposition, and report at the next meeting of the Association. The resolution was lost.

The Business Committee offered the following resolution, having reference to a suggestion in President Colcord's address:

Resolved—That a proper member be appointed to prepare a copious index of the entire Proceedings of the Association, including the volume of the present session, and present the result of his labors at the next session, for publication in the tenth volume; that a full set of the Proceedings be placed at the disposal of such a member, to be retained by him after the labor shall have been performed.

The resolution being adopted, the Chair appointed Mr. THOS. S. WEIGAND for that purpose.

Mr. STEARNS thought that the artistic execution of the certificate for membership was not what it ought to be, and suggested the propriety of changing its form. He then offered a resolution to that effect:

Resolved—That as the certificate of membership of this Association is not considered appropriate in point of artistic execution, a committee of three be appointed by the chair to invite designs from artists for the purpose, said committee being instructed to draw upon the treasury for a sum not exceeding \$50, to pay the necessary expenses; and report results at the next meeting.

Mr. COLCORD did not think that any action was called for in the matter, that it would be time enough to act upon such a resolution when the Association should find it necessary to grant diplomas of qualifications to those who chose to compete for them. He was of the opinion that this would be the case in two or three years.

Dr. SQUIBB heartily approved of the suggestion of Mr. Colcord.

After a little discussion as to the propriety of adopting the resolution, on motion of Mr. Colcord, it was laid upon the table.

The reading of answers to queries was then resumed, occupying the remainder of the time up to one o'clock, the hour of adjournment.

THIRD DAY.—THURSDAY.

The meeting was called to order by the President elect, Mr. Kiersted, who made a short and appropriate address. The most part of the morning and afternoon session was taken up in answers to the queries of last year.

The time and place at which the next meeting should be held was discussed, when it was finally agreed that the Association should convene at St. Louis on the fourth Wednesday in August, 1861. And in connexion with that subject, Mr. Stearns offered the following:

RESOLVED—That a committee of nine members be appointed to correspond with the leading pharmacists of the western cities, inviting their attendance at the next annual meeting at St. Louis, and if practicable to organize an excursion party to start from the Atlantic cities for the same purpose.

The resolution having been adopted, the chair appointed the following gentlemen as members of that committee:—Messrs. Colcord, Boston; Meakim, New York; Parrish, Philadelphia; Stearns, Detroit; Gale, Chicago; Gordon, Cincinnati; Weyman, Pittsburgh; Thompson, Sumpter, S. C.; and Peabody, Buffalo, N. Y.

Mr. STEARNS also offered a resolution as follows, which was adopted:—

RESOLVED—That the Association will not accept any report or scientific paper written by a member or contributed by any person not a member which has been previously printed and distributed.

The meeting adjourned until 9½ A.M. on Friday.

FOURTH DAY.—FRIDAY.

DISCUSSION ON NEW LAW FOR REGULATING THE SALE OF POISONS.

The meeting was called to order by the President, the minutes were read, and on motion adopted.

Mr. HENRY N. FISH of Conn. read a paper upon the life and character of Cavendish—referring to the parentage and education of the distinguished chemist and discoverer; giving interesting anecdotes of his eccentricities, antipathies, etc., and closing with a review of his religious opinions.

The Business Committee then offered the following preamble and resolution based upon a recommendation in the President's address:—

WHEREAS—The subject of legal restraint for controlling the sale of poisons is at present much agitated in some states of the Union, and appears to be attracting unusual attention; and whereas this Association has always regarded this important subject as one of the reformations most desirable between pharmacists and the public; and whereas several bills have been enacted and proposed for the purpose of effecting the desired object, neither of which entirely meets the approval of this body, therefore—

RESOLVED—That the judgment of this Association be now had upon the subject, and that thereon a committee of three be appointed to mature a plan by which the objects may appear to be best attainable, that committee to report at the next session of the Association.

Dr. GUTHRIE remarked that the question was one which should be approached with a great deal of care, and with a determination to do something besides empty talking. All the laws that had thus far been enacted for controlling the sale of poisons were inefficient, from the fact that they began at the wrong end. One objectionable provision to his mind was that which empowered any pharmacist to dispense poisons upon the recommendation of a *regular physician*. He was not aware of any means by which such a regular practitioner could be vouched for, if he was not known to the apothecary. No man should necessarily be called a physician who could write a dove-tailed R at the head of his directions, and sign his name as M.D. at the end. It was important, then, to determine who was the *regular physician*, and equally important to decide who was the competent apothecary. He also maintained that no man should sell poisons unless he was duly licensed to do so, either by a certificate from some college of pharmacy, from the American Pharmaceutical Association, or from one or two respectable practitioners of medicine in the city or village in which he resided, and that the evidence of such an ability should be displayed in a conspicuous place

in his store. The whole object of this was simply that the apothecary, when he comes to deal out poisonous doses, shall feel that he has a responsibility to bear, and is to answer to some one for the manner in which it should be done. He thought that the adoption of some such measure would be the first step in the right direction.

Mr. CODDINGTON did not suppose that any restrictions upon the sale of poisons would do away with the tendency to commit suicide; but, on the contrary, the provisions of the law were such that any person could purchase poison by the wholesale, and thus, if necessary, always have it at hand in the house to help themselves out of the world, when their determination for so doing should be sufficiently strong. Again, by keeping poisons in such quantities around the house they might very often be used by mistake for culinary purposes. Even if the difficulties of procuring poisons were much greater, it would then only become with the suicide a choice of means.

Medical News.

ARMY MEDICAL INTELLIGENCE.

ABBOTT.—The leave of absence heretofore granted to Assistant Surgeon R. V. Abbott has been extended until December 1, 1860, with permission to leave the Department of Texas.

FOARD.—Leave of absence for four months has been granted to Assistant Surgeon A. J. Foard, Medical Department.

McKEE.—Assistant Surgeon J. C. McKee, Medical Department U. S. A., will proceed, without delay, to Fort Craig, and report for field service to Major R. C. Gatlin, Seventh U. S. Infantry.

VANSANT.—Assistant Surgeon J. Vansant, Medical Department, has been assigned to temporary duty at Fort Dalles, Oregon.

NAVY INTELLIGENCE.

CHARLTON.—Assistant Surgeon Thos. J. Charlton has been ordered to the Naval Hospital, Chelsea.

GARNETT AND KENNEDY.—Assistant Surgeon A. S. Garnett has been detached from the Navy Yard at Washington, and ordered to proceed by steamer of 5th October from New York to Key West, and report for duty on board the United States steamer Wyandotte, as the relief of Assistant Surgeon Stewart Kennedy.

RUSCHENBERGER.—Surgeon W. S. W. Ruschenberger has been ordered to proceed to Norfolk, to report for duty on board the steam sloop Richmond.

SANFORD AND SHELDON.—Assistant Surgeon J. W. Sanford, jr., has been ordered to proceed to Key West by steamer of 5th of October, to relieve Assistant Surgeon H. L. Sheldon, of the U. S. steamer Crusader.

REDUCE the death rate of New York to the death rate of Paris, and you will save 4,000 lives annually. Reduce the death rate of New York to the death rate of London, with a population thrice as great, and you will save 9,000 human lives every year. Make New York as healthy as it was fifty years ago, and you will save more than 11,000 human lives every year. And if you raise the health of New York to the standard proposed by the English General Board of Health and of the Registrar General, you will save annually nearly 15,000 lives.—*Robbins*.

TOOTHPICKS AND THEIR IMPORTATION.—Where do the toothpicks come from? It is supposed that the Yankee, when he first felt the necessity of cutting a stick of timber in order to provide himself with a toothpick, gained the knowledge of whittling, and has since kept and improved upon the lesson. A New Englander will produce a toothpick with his knife from almost everything except a bar of iron, but with all his inventive genius it has remained for the natives of Chili to supply this toothpicking nation with

a large proportion of the instruments for gratifying their habit or necessity. The aged and decrepit and the young of both sexes of Chili are engaged in preparing those little orange sticks that one finds at every restaurant and hotel in the city and country. These they whittle out with astonishing rapidity, at the rate of five or six hundred in an hour. The sticks are then packed in bundles of a thousand each, and sent to this city; being imported expressly by a lady in Division street, whose son superintends their manufacture in Chili. Here the toothpicks are sold for twenty cents a thousand, and scattered all over the country—placed in the restaurants and hotels, and in the hands of every toothpicking Yankee in the Republic. To such an extent is this traffic carried, that the proprietors of the Astor House alone purchase eight or ten barrels of every importation, and retail them among the country hotels. A restaurant with a good run of custom will consume about twenty thousand toothpicks in three weeks.

EPIDEMIOLOGICAL RECORD.

DIPHTHERIA continues to prevail in some sections of Central New York. Dr. Geo. W. Bradford, of Homer, Cortland county, furnishes the following statistics of diphtheria occurring in his practice. "The first case appeared in May last—the total number to September 1st is fifty-two, of which eighteen were males and thirty-four females.

Under 1 year of age there were	2 cases.
Between 1 year and 5 years of age there were	9 "
" 5 and 10 " " "	16 "
" 10 " 15 " " "	5 "
" 15 " 20 " " "	8 "
" 20 " 30 " " "	6 "
" 30 " 40 " " "	4 "
" 40 " 60 " " "	1 "

Total, 52

This includes all that were attacked with the ordinary symptoms of diphtheria; of this number thirty-seven (37) had membranous deposition, and several of those patients who had not that symptom were among the most severe and difficult cases—suffering more pain and difficulty in deglutition than many who had abundant membranous exudation in their throats."

Dr. Caleb Green, who practises in the same district, writes that up to the present date he has treated forty cases of diphtheria. He states that his treatment has been the same as that of other physicians in that district, viz. "rubefacients steadily persevered in during the progress of the case, and immediately followed by the application of water fomentations to the throat, internally. Our main dependence is Tinct. Mur. Ferri, Quinia, and the Chlorate of Soda or Chlorate of Potassa."

TYPHOID FEVER is prevailing extensively, but strictly in a sporadic form, in various sections of the elevated districts of the southern tier of counties in this state.

DYSENTERY is prevalent in the same sections of country, and seems to be complicated with certain bilious and typhoid febrile conditions.

The cities and large villages of the state of New York are unusually free from febrile and diarrhoeal affections, abating *cholera infantum* in this city. The excellence and great abundance of the fruits of the season, and the comparative dryness of the atmosphere, are facts worthy of notice in connexion with this statement respecting the health of our cities; while in connexion with the foregoing record of diphtheria, dysentery and enteric fever in the region of high summit lands and elevated valleys, the notable fact of excessive humidity and an extreme diurnal range of temperature has been noted by observers there. The altitude of that district is from eleven hundred feet (in its valleys), to sixteen hundred feet above the level of the sea, and its natural drainage may be considered the most perfect of any section of this state.

CHOLERA is reported in Spain, and at Madras, in India.

TO CORRESPONDENTS.

Vaccina.—Good virus can always be obtained by addressing Dr. Loines, at the Eastern Dispensary, No. 57, Essex Street, corner of Grand.

Student.—The students' number will contain the information you require.

G. G. B.—We do not desire to engage in any quarrel, but simply to give current medical news derived from responsible sources.

E. C.—Your article on Rational Medicine I read with interest. It is appropriate and just. Although by no means so much disturbed by Dr. Holmes' address as some of my brethren, I regard his statements as false. It is therefore best that they should be shown to be so."

Italian.—You will find in the "Week" of this number the appeal alluded to.

M. D. B.—Cupping-glasses with elastic tops are manufactured by the American Hard Rubber Co., and are by far the best in use.

COMMUNICATIONS have been received from:—

Dr. JOHN G. JOHNSON; Prof. C. B. COVENTRY; Dr. CHARLES RYND; Dr. CHARLES H. RAWSON; Prof. GEO. C. BLACKMAN; Dr. CHARLES; Dr. SMITH, London; Dr. W. B. ATKINSON; Dr. CALVIN ELLIS; Dr. H. A. POTTER; Dr. JAMES C. OXTON; Dr. JOHN H. GRISCOM; Dr. VEDDER; Dr. BATCHELDER; Dr. TUCK; Dr. ENGLISH; Dr. H. TOWNSEND; Dr. BRADFORD; Dr. LYMAN; Dr. JENKINS; Dr. CHISHOLM; Dr. R. D. BOBERT; Dr. HUBBARD; Dr. ZARRISKIE; Dr. KERICK; Mr. E. PARRISH; Mr. BERRINGTON; Dr. DUGES; Dr. W. H. FOULDS; Dr. E. W. MILLS; Dr. H. OLIVER; Dr. A. F. PATTEN; Prof. L. J. ROBERT; Dr. T. C. WALLACE; Dr. S. H. JACKMAN.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 15th day of September to the 22d day of September, 1890.

Deaths.—Men, 97; women, 88; boys, 156; girls, 189—total, 480. Adults, 185; youth, 17; children, 278; males, 258; females, 237; colored, 5. Infants under two years of age, 216. Among the causes of death we notice:—cholera-infantum, 49; infantile convulsions, 22; croup, 6; diarrhoea, 16; dysentery, 12; scarlet fever, 20; typhus and typhoid fevers, 11; measles, 6; small-pox, 4; dropsy of head, 19; infantile-mareasmus, 49; nervous system, 58; respiratory, 181; digestive, 171.

SEPT.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10	In.
16th.	30.07	.14	70	64	76	5	8			
17th.	29.94	.12	69	65	76	4.5	10	SW.	9.5	
18th.	30.00	.10	68	61	74	7	11	SE.	1.8	
19th.	30.00	.10	73	65	80	5.5	8	SE.	9.4	
20th.	29.90	.37	73	64	80	4	6	SE.	9.9	
21st.	29.90	.30	62	53	66	9	18	NW.	4	
22d.	30.04	.18	64	54	67	9.5	14	SW.	0	

MEDICAL DIARY OF THE WEEK.

Monday, Oct. 1.	CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Barker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Oct. 2.	CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, half-past 1 P.M.
Wednesday, Oct. 3.	EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Gouley, half-past 1 P.M. ACADEMY OF MEDICINE, 8 P.M.
Thursday, Oct. 4.	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Watson, half-past 1 P.M. BELLEVUE, Medicine, Dr. Macready, 12 M.
Friday, Oct. 5.	CITY HOSPITAL, Surgery, Dr. Markoe, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Oct. 6.	BELLEVUE, Surgery, Dr. Parker and Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

NEW YORK SANITARY ASSOCIATION.—The committee appointed to investigate the case of poisoning reported by Dr. GRISCOM, will report at the next meeting. COMMITTEE:—DRS. S. R. PERCY, ROBERTS, AND BATCHELDER.

COLLEGE OF PHYSICIANS AND SURGEONS.—Order of preliminary lectures remains unchanged.

UNIVERSITY MEDICAL COLLEGE.—On Monday, Oct. 1, the professors commence their preliminary lectures.

NEW YORK MEDICAL COLLEGE.—Order of preliminary lectures remains unchanged.

Original Lectures.

CLINICAL LECTURES ON AMPUTATION.

DELIVERED AT THE NEW YORK HOSPITAL.

BY

JOHN WATSON, M.D.,

ATTENDING SURGEON.

LECTURE IV.

WE have now, Gentlemen, gone over some of the points connected with surgical operations, particularly amputations; we have alluded to the different amputations, the various methods of performing them, and the indications which should determine your course of action. At our last discourse we went over, in a summary way, some of the points which it was necessary for you to take into account in connexion with the consequences of severe operations. I dwelt at that time, however, more particularly on those troubles which belonged to disturbances of the vascular system, and only, under the head of nervous disorders, made a reference to tetanus. I said but little, however, of the shock that was attendant upon severe injuries or upon operations; neither did I refer to *coma*, *traumatic delirium*, or *delirium tremens*. All these complications are worthy of your attention, inasmuch as you will find most, if not all of them, of very common occurrence in your surgical practice.

What do you mean by shock? It is a depression of the vital forces. Now, you will find that the intensity of this prostration, its duration and time of appearance after the accident, varies very greatly in different individuals, depending for the most part on their temperament and the severity of the injury. You will see some patients, after a very severe laceration, brought into the Hospital with little or no shock, as in the case we have just looked at down stairs. That man is suffering from a compound comminuted fracture of the leg, and the limb has been terribly twisted, yet a half an hour after the accident he suffers but little pain, and his pulse is normal in frequency. In all probability, if you visit him six hours hence, you will find altogether another stage of things, that is to say, there will be a marked depression of his vital energies; his pulse will be weak and small; his skin cold and clammy, and there will be jactitation present. If that man's limb required amputation, by an operation I would ward off that accumulation of shock; in other words, I would anticipate it, and would relieve his system of the burden, as I did recently in another similar case. About ten days ago, a man was brought into the ward under the same circumstances, and had also a compound comminuted fracture in nearly the same locality which, however, required amputation. I saw him very soon after the accident, and took off his limb before the shock had sufficiently accumulated to weigh down his energies, and thus gave him a much better chance than if I had waited. In all cases of that character, when you see them at that time, do your duty at once, for you need not hesitate concerning the propriety of the adoption of such a measure. This, I think, is a point which is not sufficiently insisted upon. The general impression is, that the shock comes on immediately; this is a great mistake; the system requires some little time to feel the impression. An accident in its effects is not unlike in character a violent moral emotion. Let me give you an instance. I told a lady, whom I saw some two or three weeks ago, that a very near and dear relative of hers, who was exceedingly ill at the time, was likely to die. On receiving such a piece of intelligence she appeared, to all intents and purposes, indifferent, as if she regarded it as a matter of course. I then left her to return the next day and find her weeping most bitterly at the thought of such a result, showing that the moral sensibilities in the meantime

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had accommodated themselves to the circumstances, that after a lull the storm had burst in all its fury. There is, then, an interval between the reception of the cause and its effect, which, as I remarked before, varies with different individuals.

Now, you may mistake what we mean by shock for something else, for *collapse*, which it resembles very closely; but it is very important that you mark the difference between the two. Collapse comes on a long time after the reception of the injury, after reaction has been attempted, or when the system can no longer resist the effects of the shock, and is perfectly exhausted. In shock you have some chance for recovery, in collapse much less, and sometimes none at all. You see, then, a proper distinction between the two, and, as far as it relates to the matter of prognosis, it is of vital importance. What, then, are the symptoms of shock? There is a sudden arrest of the development of nervous power; the steam, so to speak, is cut off from the machine; the nervous power generated in the brain and various nervous centres is arrested; the heart no longer feels the influence of its accustomed stimulus, and its action is in consequence interrupted; all the secretions of the body, for the same reason, are checked, and perhaps nearly cease to work, until such time as the system can restore its equilibrium and reaction is established. Occasionally you will find a person suffering from shock who is entirely unconscious; this, however, is not a general thing unless the shock has involved the organ of thinking more than the rest of the body, that is to say, the brain. If that organ be involved, we have a complication of shock described in the books under the head of *concussion*, and which is liable to run into *coma*. This state of things must not be compounded with shock *per se*. Concussion expresses the mechanical condition as affecting the vital action, while coma by itself only refers to the intellectual condition referred to, or in other words, the shock. The amount of coma, in some instances, may be out of all proportion to the amount of shock, while in other cases the shock may be out of all proportion to the amount of cerebral disturbance, showing how in different cases the gravity of the prognosis may be modified. In some cases, then, the shock may be very severe and yet the mind be perfectly clear. Shock may not only exhaust the thinking faculties, the power to express and observe, but it goes a little further than this, it destroys the power to feel. I remember one man who was admitted years ago into this Hospital, who had fallen into a lye-tub, scorching the whole surface of his body. That man told the class of students assembled at the bedside, that he suffered no pain and had not since the start. Why was this? Because the shock had been so intense as to destroy his perceptive power. In connexion with this loss of sensibility, as is always the case, there was great exhaustion. He was breathing fast and short; he was tormented with excessive thirst; his skin was cold; his tongue purple, and in an hour or two after he calmly expired. The power of sensation will sometimes fail before the intellectual, as in the cases of etherization. You place the saturated sponge to the nose and mouth of the patient, and the first effect produced is a loss of sensibility to pain; he will not suffer during the operation, although he has consciousness enough left to know what is going on; you carry your *anæsthesia* further, and his perceptive power also will be gone. I will give you another case that will illustrate what I am speaking about:—A lad was admitted long since into this Hospital, whose thigh was torn off at the hip joint, and it was necessary to remove the head of the bone. The vessels were so thoroughly torn that there was no hemorrhage; the femoral artery at the groin was beating at a furious rate. The patient was pale, had a rapid pulse and hurried respiration, but suffered no pain whatever; all he desired during the operation was an occasional drink of water, and when this was given him he would turn with the utmost unconcern to watch the surgeon trimming the wound, as if only to satisfy an idle curiosity to see how things were progressing. These, then, are the different varieties of

shock and their effects upon the system generally. I give them to you in this way rather than in the abstract, in order to impress the important points more forcibly upon your mind.

Following in the train of shock is reaction; this will show itself at a longer or shorter time after, according to circumstances; if the system feels the effects of the injury soon after it is inflicted, then reaction will come on proportionately quick; if the opposite is the case, the appearance of the action will be delayed accordingly. Reaction, in its turn, results in febrile disturbance, and then you have the trouble transferred from the nervous to the vascular system.

Now, there is a state of things which does not belong under the head either of shock, or of collapse, though allied in certain respects to both, and that is what is usually known as the *state of reverie*. A violent mental emotion, for example, will sometimes arrest the vital action to a certain degree. I remember a lawyer telling me, that he had occasion to examine a man in a very important trial, and one who, he was sure, was swearing falsely. He knew it not alone by the answers that were given, but also by the looks of the guilty one. When the man descended from the witness-stand, he sat down in a chair and was unable to rise from it for six hours; he was literally paralysed in consequence of the mental revulsion that was attendant upon the consciousness of his having done wrong. Here was an instance of reverie, an arrest of nervous power, caused by a violent mental emotion; the same thing may come on from injury, although this is not such a common cause as the one I referred to.

I have alluded cursorily to *coma*; this is a condition of things which varies very much in degree, all other things being equal, according to the portion of brain that is injured. A man who has a cracked skull, with a little depression, for instance, of the frontal bone, will perhaps be brought into the ward in a stupid state, but the shock which he has received does not prevent him from answering yes or no to questions, nor from swearing at you if such examinations are extended to greater length than is satisfactory to him. This man is only a little confused, as if partially intoxicated. Another person has fallen not half so far, nor with half so much force, and yet he is perfectly overpowered; he cannot speak, his pupils are both dilated, his breathing is slow and heavy, his pulse is also slow, and he is perfectly unconscious of everything that is going on around him. In the former instance the case is a simple one, and will probably recover, while in the latter you have a fracture of the base of the skull, and the result will be fatal; for the intellect is not, so to speak, arrested in its action, but is completely destroyed.

Sometimes the very opposite state of things takes place in consequence of shock, and that is wakefulness. This, when it occurs, is much worse in its effects than ordinary coma, inasmuch as it is apt to last for two or three days and eventuate either in furious delirium or mania. Not unfrequently this condition follows the shock of confinement in some women of nervous temperament, and when it does occur, is regarded by the experienced practitioner with great anxiety in reference to its results.

We now come to speak of another attendant upon accident which is known as *traumatic delirium*. These cases are very frequently confounded with mania-à-potu. It is a great mistake to look upon them as pathologically the same. Delirium tremens is always associated with drunkenness, but the other may come on in persons who are not addicted to drink. An attack of mania-à-potu may be the result of any slight cause and soon pass off, but traumatic delirium is always the result of a grave injury. The former generally comes on very soon, while the latter makes its appearance after many days. You must also remember that it is very rare for a case suffering from traumatic delirium to recover, and if the patient do recover you may, upon very good grounds, doubt the accuracy of your diagnosis. Now I will give you a case. A man has a badly crushed leg and goes on very well for three or four days, suffering considerably from excitement, and somewhat from delirium

when these symptoms subside. The wound, which was previously sloughy, begins to clear off, and you have hopes of him. The next day you go to his bedside and he tells you he is well, and asks if he cannot get up and be about. This question, under the circumstances, is enough to alarm you of the danger of your patient. His pulse is steady, perhaps a little too frequent; he has no trembling, no twitching of the muscles, in fact nothing can be noticed about him except this ominous delirium, and the experienced surgeon makes up his mind that the patient is going to die.

Now *delirium tremens* ought to be a study almost by itself; there is a good deal to be said about it, and I could spend two or three hours in giving you a description of all its varieties. The attack comes on very differently in different persons, and depends upon a variety of causes, being almost always of something that is going wrong in the system. I have rarely seen it as a spontaneous affection. There is another state of the system, which is also a constitutional manifestation in a man addicted to drunkenness, where there is no delirium whatever present. It is a form of disease that has been described of late years by the Danish and Swedish writers as *alcoholismus*. You have doubtless often seen such cases, and you will agree with me in saying that it can be easily recognised when your attention is once drawn to it. Persons suffering with this trouble may be able to tend to their business and work, but they are inclined to be stupid; weak, bodily and intellectually; subject to more or less constant tremulousness; the most trivial cause serving to upset their nervous energies. It can easily be seen that as in delirium tremens the occurrence of an accident intensifies the symptoms and renders them consequently more distinctly recognizable. But to return. Delirium tremens makes its appearance at other times than after an accident, but it does not follow that it is not nevertheless a symptomatic affection. A sailor returns from a long voyage with a pocketful of money, and for want of something better to do, spends it all for drink. He continues his libations for a day or two, and the stomach being unaccustomed to that amount of stimulation takes on inflammation. He loses his appetite in consequence, and soon his mind is wrapt up in all the horrid delusions attendant upon delirium tremens. Now what is the start of this trouble? Delirium tremens succeeded the irritation of the stomach, the gastritis if you please, and is symptomatic of that. This is a type of the disease which is very common. Just as the previous habits of the patient have been, just in proportion will the disease continue for a longer or shorter time. If the man, previous to the attack, has been habitually temperate, as soon as the alcohol is washed out of his blood he is all right; if, on the other hand, he indulges frequently, the urgent symptoms of the attack will pass off but not entirely, and he may be the subject of delusions for weeks, and perhaps months, afterwards. Any other disease besides gastritis may produce in a dram-drinker the same state of things. I have seen it follow an attack of inflammatory rheumatism, and it is frequently associated with pneumonia and bronchitis. Now with respect to the treatment of delirium tremens. I need not describe to you the symptoms of this affection, the cases are so plain "that he who runs may read;" you have a wandering disturbance of the mind with a tremor of the muscles and wakefulness. Let us first take up the question of bloodletting in this disease as a curative agent. There is a tradition in this hospital that one of the young men, about thirty years ago, had a violent case of delirium tremens, which came in late at night. The Dr. sent word to Dr. Hossack, who was Attending Surgeon at that time, to ask advice on the matter. The message was this: "Dear Doctor, a patient has been admitted in a furious state of delirium, following a protracted debauch. I bled him freely, but the symptoms still continue. What is to be done?" The reply made was very significant. "He will require no further treatment." Shortly after the patient was dead. Now, as a general rule, delirium tremens is a form of disease which above all others requires supporting treatment, but there are exceptions of course to

the general rule. I remember one poor fellow, a sailor, who in a fit of delirium tremens stabbed himself in the abdomen and then jumped into the river. The wound bled very freely, and when he was brought into the hospital the delirium had entirely disappeared, and nothing was left for us to treat but the wound, which was not a dangerous one, and the patient recovered without a bad symptom. Here the loss of blood and the cold bath did the business for him. The treatment must, as in all other diseases, vary with the circumstances of the case. It has been found that in a great many cases all that is required is a good sleep. Knowing the efficacy of this, the practice has been to produce this sleep, if it does not come on naturally, by the administration, if need be, of a large anodyne. I have seen, in times gone by half an ounce of laudanum given at a time with a view of producing an effect, so that it was oftentimes difficult for me to satisfy myself whether the patient was dying from the medicine or the disease. We don't resort to this violent practice at the present day—it is altogether unnecessary and besides it is very dangerous. As I described to you before, a man with delirium tremens is apt to have gastritis, which renders him unsuspicious to the drug, unless it be given in poisonous doses. It was Dupuytren who first called attention to this fact, and in order to produce the same effect with a smaller quantity of the drug, he suggested the propriety of injections into the rectum, inasmuch as the mucous membrane of that locality was in a healthy condition. There is another way of treating delirium tremens by producing a revulsion upon the nervous system by exhausting the excitability. This is the advantage of the plan of treatment proposed by Dr. Clapp, of Pennsylvania. He was in the habit of giving a powerful emetic, when the patient would in consequence become exhausted and so fall asleep. If this did not suffice calomel was combined with the emetic, which also caused slight purging, and this treatment continued for two or three days generally brought the disease to terms. It is a pretty good practice, but it is one which can only be resorted to in persons who have a vigorous constitution. Another plan, which is found efficacious in some cases, is moderate doses of ipecac in the form of Dover's powder at bedtime. Another practice is to keep the nervous system properly balanced by the judicious administration of the accustomed stimulus, to keep up the steam so to speak. The practice of this house is a mixed one in regard to the treatment of this disease; we combine all the methods, and make use of one or other when any special indications in a given case demand it.

JOHN HUNTER.—The Council of the Royal College of Surgeons have just caused a beautiful memorial tablet to be placed over the site of the grave of Hunter, resting in Westminster Abbey, with the following inscription: "Beneath are deposited the remains of John Hunter, born at Long Calderwood, Lanarkshire, N.B., on the 13th of February, 1728. Died in London on the 16th of October, 1793. His remains were removed from the church of St. Martin's-in-the-Fields to this Abbey on the 28th of March, 1859. The Royal College of Surgeons of England have placed this Tablet over the grave of Hunter to record their admiration of his genius as a gifted interpreter of the Divine Power and Wisdom at work in the Laws of Organic Life, and their grateful veneration for his services to mankind as the Founder of Scientific Surgery." The above inscription is deeply cut in brass of a Gothic design, inlaid in a slab of polished red granite, and presents a chaste and elegant appearance. The work has been executed by the Messrs. Hardman of Birmingham. Mr. Weekes, the eminent sculptor, is progressing favorably with the statue of Hunter, which is to be of marble, and to be placed in the Hunterian Museum. Mr. South, the President of the College, is still receiving subscriptions to go towards the foundation of a scholarship after the payment for the statue. Our transatlantic brethren, who have already sent a handsome sum to Mr. South, are continuing their subscriptions.—*British Jow.*

Original Communications.

A STATISTICAL CONTRIBUTION

TO THE

DIAGNOSIS OF CANCER OF THE STOMACH.

BY

JAMES C. ORTON, M.D.,

OF NEW JERSEY.

(Continued from page 232.)

THE constant symptom of all gastric derangements is always present in cancer of the larger curvature, but is too variable in constancy and severity to be considered specially. Generally, it amounts to a mere uneasiness in the early stages of the disease, gradually increases in severity, being most troublesome during the digestion of food, and relieved by vomiting. It finally becomes a seated pain at the pit of the stomach, aggravated after taking food, or on pressure being made over the epigastrium. Rarely the stomach is not the seat of pain.(a) In such cases it may be complained of only in the lumbar region, or chest, more often it has taken the form of a "colic" easily allayed by carminatives. Vomiting is the symptom of which patients more usually complain.(b) It may be one of the earliest symptoms, and towards the termination of the case become much less severe, but more often these relations are reversed, the vomiting being later, and occasionally causing a sudden termination of the disease. It is very rarely absent during the whole course of the complaint. The only peculiarity of the vomiting in cancer of the large curvature, in its earliest stages, is the period after eating at which it occurs. This is according to the situation of the growth or ulcerated surface, whether it is near the cardiac or pyloric orifice. In proportion as it recedes from the former, is the length of time at which emesis occurs after taking food.(c) When the disease is located in the left extremity the pain is often very severe, almost immediately after the act of deglutition, but the vomiting is not constant. When the centre of the large curve is alone involved, pain sets in soon after eating, and gradually increases until vomiting takes place, when it begins to decline. This occurs from half an hour to two hours after taking food, but if the disease involve principally the pyloric extremity, the vomiting is delayed three or four hours. Vomiting becomes diagnostic of cancer when the matters ejected are offensive and contain blood. This is the *coffee grounds* appearance which marks the ulcerated cancer, and, of course, the last stage of the disease. In reviewing this symptom it may be said that vomiting is not invariably present, is milder and less frequent when the disease is at the left than at the right, and when in the centre may be entirely absent. It is often preceded and followed by offensive eructations in the early stages, and discharges from the mouth of thin, ropy mucus.

In cancer of the larger curvature of the stomach a tumor, or fullness, or unnatural hardness may be discovered at some period of the disease in the epigastrium. Taken in connexion with the symptoms which have preceded or which accompany it, this tumor may furnish the first unequivocal evidence of the precise nature of the difficulty. The period at which this tumor may be discovered on examination, is doubtless early, although it is generally not detected until the disease has far advanced. When the cancerous growth is seated in the left extremity the tumor may be found just below the ensiform cartilage, in the same situation as when the cardiac orifice is involved with cancer of the cardiac extremity of the stomach.

(a) Of three cases of encephaloid tumor of the great cul-de-sac—one had great pain after eating—two severe pain in stomach.

(b) Of ten cases—eight vomited, one not, one no note.

(c) Of three—one vomited early in disease; none towards close; one vomited at close, blood, pus, and bile; one not given.

When the tumor is large it is sometimes movable, which may assist in distinguishing it from those cases where the orifice is involved. It more often is felt much lower, and has been mistaken for a tumor of the spleen and pancreas. In cancer of the central portion of the curvature the tumor is felt near the umbilicus, and most generally a little above and to the right. Generally a distinct well defined tumor may be made out, but in other cases, where the disease is extensive, involving all the coats, it may be felt only as an undefined hardness. When pressure is made upon this tumor, the pain, or uneasiness is greatly increased, and sometimes it gives rise to vomiting. A peculiarity several times noticed is the subsidence of the tumor after free purgation, probably from a breaking down of its substance. The tumor has also been observed to pulsate, when the disease was situated near the pylorus. In such cases it has been found situated directly over the aorta, of the pulsations of which it partook. It has only a pulsatory movement, not the lateral expansion of an aneurism, for which it might be taken. It does not increase to a great size, but generally remains apparent only on manipulation.

The general symptoms which may arise are various, and by no means uniform. The bowels are constipated early, but later often free, with tendency to diarrhoea. The appetite is always poor when the disease involves the cardiac extremity, but more often voracious and capricious when seated in the central position. The tongue is not much changed; the pulse and general strength proportionate to the ability to take and retain food. Emaciation is far from being marked in most cases, though it is progressive. The complexion but seldom, comparatively, has any distinctive or diagnostic appearance. The immediate cause of death is sometimes sudden hemorrhage from the stomach; more often the result of frequently-repeated attacks. Edema often comes on, and ascites, due to the impoverished and cachectic condition of the system. Cancer of the smaller curvature of the stomach runs a course somewhat different from that which we have first considered. This is due to its anatomical position and pathological structure. Cancer in this situation is less subject to the pressure and irritation of food, to the compression exercised by the stomach in its contractions, and finally it is always of the scirrhus variety. Pain is generally present, and often is extreme and constant, but vomiting is rarely a symptom. Occasionally, however, it occurs after ulceration has taken place, and sometimes proves fatal at once from the quantity of blood lost. When it is present, it comes on sometimes after eating. A tumor is less frequently felt in this situation than when the larger curvature is the seat of difficulty.

PYLORIC EXTREMITY.

The pylorus is nearly twice as frequently the seat of cancer as both the cardiac orifice and the body. It occurs five times as often in males as females. The age most subject to it is included between the fortieth and fiftieth years, it being a disease rather of middle than very advanced life, as in the case when the cardiac orifice is involved. (a)

The duration of the disease, dating from the appearance of acute symptoms, does not often extend over one year, while a majority prove fatal within six months. Symptoms of dyspepsia are experienced for many years; but it is not probable that they bear any causative relation to the disease. As in the other localities noticed, cancer of the pylorus does not depend upon any particular habit, or occupation, or condition of body traceable. The great preponderance of males over females might lead to the supposition that habits of intemperance or occupation might have, if not a predisposing, an exciting cause in its production; but facts do not confirm the opinion.

Pain is again a prominent symptom in most cases. It varies with the action of the stomach, whether quiet or

engaged in digestion. It is least, and often entirely, absent in the interval of taking food. Pressure over the pylorus greatly increases it, as in the former case, when pressure was made over the tumor. It may be entirely absent; and in such cases the disease runs a very obscure course.

Vomiting is rarely absent. It generally takes place several hours after eating, and is followed by great relief. The effort is not great, and the act is desired for the relief which it gives. Vomiting, in cancer of the pylorus, is not wholly dependent upon the contraction of the orifice, as that condition occasionally exists when vomiting is a persistent symptom. There is nothing diagnostic in the character of the vomiting until ulceration takes place, when blood and the cancerous debris are the matters ejected.

As, with careful manipulation, the pylorus may be felt through the walls of the abdomen in a healthy person, not unusually fleshy, so the detection of a tumor, or the early enlargement and induration of the cancerous growth seated in this place, may be detected. On the care with which the early examination is made depends the early detection of the disease. The symptoms already referred to are not individually or collectively reliable in the formation of an opinion; but in connexion with the detection of a tumor they become of great importance. The tumor is generally seated to the right of the umbilicus and ensiform cartilage, at a variable distance from them, both laterally and vertically. It increases the pain or distress, which may have previously existed at that point, to make pressure upon it directly or even remotely. The tumor may, however, be absent, or undefined, in which case it protrudes backwardly. If other symptoms are then not marked the disease passes on to a fatal termination unrecognised.

The general symptoms are such as belong to cancer of the cardiac orifice. Obstinate constipation is early present, but as the case advances diarrhoea alternates. Emaciation is generally marked, but depending, as in the other case, upon the degree of ulceration. If this should be such as to leave the orifice free, vomiting will not be so frequent, and the food may have time to digest and the fatty matters to pass into the intestines and be absorbed. The complexion is not more markedly cancerous than in other instances; death takes place usually from exhaustion, but not from inanition, as in cancer of the cardiac orifice. The exhaustion is occasioned by the constant suffering, and frequent losses of blood by vomiting.

In reviewing briefly the symptoms of cancer of the stomach when located at the cardiac and pyloric orifices, and in the body, we cannot fail to notice some points of difference worthy of attention in diagnosis. Pain is common to all and not reliable in itself. Taken in connexion with other symptoms it has a relative value. Vomiting is also common to all, but peculiarly different in cardiac cancer from that occurring in the other situations. It follows during or soon after the act of deglutition, which is painful. In cancer of the body or pylorus it takes place at a period after eating, depending upon the situation of the disease from the cardiac orifice. A tumor is discoverable only in cancer of the body, and pylorus primitively. It is not possible with this alone to discriminate between cancer of the pylorus and body, so variable is its location. In general we may say that it is larger, and more easily defined as a tumor, when the body is the seat of a cancerous growth.

CONCLUSIONS.

The most important symptom, therefore, in cancer of the cardiac orifice, is *difficult deglutition*, the constriction being seated on a line corresponding with the orifice.

The most reliable symptom of cancer of the body is a tumor which cannot ordinarily be early detected. Of the earliest symptoms, pain always after eating, finally relieved by vomiting—eructation of fetid gas, ropy and fetid mucus—intervals of entire relief—absence of fever—constipated bowels, are most reliable.

(a) Males, 30; females, 6—26, 2; 30, 4; 40, 11; 50, 7; 60, 8; 70, 2; 78, 1.

In cancer of pylorus, the tumor early detected, taken with the seat of pain, which may be lancinating, relieved by vomiting, with the other symptoms, as in case of cancer of the body, give the best evidence of the nature of the difficulty.

In the diagnosis of cancer from other affections of the stomach, the symptoms now reviewed would have to be relied upon. The difference is ordinarily sufficiently well marked by the occurrence of several of these symptoms together.

SOME ACCOUNT OF THE MORE IMPORTANT WATERING PLACES OF GERMANY.

BY CHARLES D. SMITH, M.D.

IN this age of steamships and railways the facilities for reaching and travelling in Europe have increased so rapidly that localities heretofore almost unknown are now frequented, and once inaccessible places brought near. Especially is this the case with regard to those lovely spots, the German watering places. Formerly familiar to Europeans alone, they have become, of late, the resort of our own countrymen; and, at the present time, hardly a mineral bath of any celebrity exists which does not include, among its yearly visitors, numbers of our citizens. Nevertheless, whilst their attractions are appreciated by the mere pleasure seeker, their rich resources for health are not, I think, fully apprehended.

At the present day, when change of air and scene, regimen, and general hygienic measures are more enforced in the treatment of chronic diseases than drugs, it occurs to me that the prominent German Spas, whose waters are so efficacious, should be brought more into notice; and, with this view, I think it may not be uninteresting to your readers to present a familiar sketch of those I have visited.

The Duchy of Nassau contains within its small limits several of the most noted springs of Europe, alike beneficial in internal and external use: prominent among these are Ems, Wiesbaden, and Schwalbach.

The little town of Ems is situated on the Lahn, a small stream, running through a narrow valley, between high mountains, towards the Rhine. It is reached by railway, in one hour after leaving the Rhine boat, through a pretty country decorated with highly cultivated fields and picturesque ruins of ancient fortresses and castles. The houses and hotels, which are commodious, are situated on both banks of the river, the grounds tastefully laid out, well shaded, and plentifully supplied with seats, affording shelter and rest to the promenaders going through the process of imbibing. The society is always good, and there is no place which enrolls among its visitors so many distinguished personages as Ems. Kings and princes, Grand Dukes and rulers of the neighboring principalities, annually congregate here, not only to drink the waters, but to enjoy in the society of the refined and intellectual perfect freedom from court conventionalities. Owing to its situation between high hills it is very hot in summer, and on that account the "season" continues somewhat late in the Fall. Four to five thousand strangers visit this little town every year, and the number is said to be on the increase.

The two sources which furnish the water are called the Kesselbrunnen and the Kränchenbrunnen, the former is of the temperature 116° Fahrenheit, the latter 91°. They are taken warm, are easily digested, and not unpleasant to the taste. According to Kastner, the first contains, in 16 ounces, 31 grains of solid ingredients, viz.:

Carbonate of Soda	20.01
" Lime	1.97
" Magnesia	1.19
" Iron	0.03
Chloride of Sodium	7.02
" Potassium	0.03
Sulphate of Potash	0.54
Silica	0.40
20 cubic inches of Carbonic Acid.	
½ cubic inch of Nitrogen.	

The Kränchen is the most active and most used. It contains, in 29 grains of solid constituents, 17 of carbonate of soda, 2 of carbonate of lime, 7½ of chloride of sodium, and is in other respects analogous to the former, with, however, more carbonic acid and nitrogen. Two to five tumblers, according to the circumstances of the case, are taken in the morning fasting, and, occasionally, if warrantable, after dinner. The water from these sources is also used for bathing, and in the "Neue Badhaus" are rooms arranged with every possible comfort and convenience. So greatly are they sought after, that it is with difficulty the newly-arrived can procure one.

Ems has a high reputation for the cure of diseases of the air passages, particularly those of the larynx. Pulmonary consumption is not cured by a residence here as was formerly supposed, but is sometimes benefited by undergoing a "course," with proper precaution as regards clothing and exposure to the night air. Hufeland was in the habit of sending patients here, confident of success, especially those laboring under the disease in its incipency; and cases are recorded of permanent good results. Aphonia, hoarseness, and tracheal catarrh, are said to be greatly relieved. "Irritative dyspepsia, sluggish liver, diseases of the digestive organs, catarrh of the bladder," and other affections of the pelvic viscera, are enumerated among the diseases put down by writers as receiving benefit from these waters. But they are more particularly applicable to the diseases peculiar to females, and, in consequence, women in all stations of life flock here for treatment. The baths are considered the important agent in the cure of their troubles; and the rule is to take one every day (excepting during catamenial discharge), for the space of fifteen or twenty minutes, at a temperature of 24° to 25° Reamur, about 86° to 90° Fahrenheit. They produce a remarkably soothing effect, inducing sleepiness, and allaying, in an eminent degree, those indescribable nervous sensations to which females with uterine affections are subject.

One spring at Ems has for many years been celebrated for curing sterility, called the Budenquille or bays spring. By means of a pipe attached to a sort of hip bath, a douche is sent with some force into the vagina. Ladies may be seen at certain hours wending their way towards the room which holds this precious water, and assiduously persevering in its employment, confident of success, and as often disappointed.

Wiesbaden, about twenty miles from Frankfort, for many years sustained a high character among the watering places of the continent, and the virtues of its springs are, perhaps, better known than many other establishments of the kind. It does not, however, at the present day, occupy the respectable position it once held, it having degenerated into more of a gambling resort. Yet its mineral waters are justly celebrated for the cure of certain maladies, and thousands flock here every season to avail themselves of their advantages. It is a flourishing town of over 10,000 inhabitants, and its clean wide streets, beautifully constructed houses and hotels, its extensive views, and surrounding diversified country, make it a desirable residence. The Duke of Nassau has his principal palace here, where he, with his court, passes most of the year. Over 20,000 strangers visit the town yearly, attracted, perhaps, more by the fascinations of play than the pursuit of health.

The heat in summer is great, yet, nevertheless, it is always crowded, and oftentimes difficulty is experienced in procuring accommodation. The winters are mild and equable, and patients, whose cases do not yield during the summer, frequently remain the whole year. No better combination of medicinal ingredients, it is said, exists for the cure of gout, rheumatism, and general arthritic diseases; proof of which is found in the hospital reports of Dr. Haas, published in Gräfe's *Jahrbücher*, of Berlin.

The Kochbrunnen (boiling well) is the principal source. It comes bubbling up with considerable force, throwing out clouds of vapor and running out into the gutters of the streets in such quantities as to astonish with its inexhausti-

ble supply. It is of the temperature of 156° Fah., is highly esteemed for bathing, and mostly employed for that purpose. The ingredients are as follow: chlorides of sodium the largest proportion, of potassium, magnesium, calcium, carbonates of magnesia, lime, and iron (the latter in very small proportion), sulphates of soda and lime, bromide of soda and magnesium; considerable carbonic acid gas, and a small proportion of nitrogen. One to two glasses are taken in the morning early, and it is advisable to drink it as hot as possible. The enthusiastic take it quite hot, others wait until it becomes cool. It acts very kindly, relieving at once those unpleasant symptoms of the stomach to which dyspeptics are subject. *Too much* will cause diarrhoea and derangement of the bowels difficult to get rid of. It is in taste very like weak chicken broth, and it is a long while before patients can drink it with any pleasure. These waters are also highly recommended in "metastatic diseases arising in consequence of repelled cutaneous eruptions, in inveterate contractions, and even in ankylosis; and are considered injurious in great debility, fevers, and tendency to hemorrhage."

On the road from Wiesbaden to Ems, about two hours' drive from the former place, is the small town of Langen Schwalbach, at an altitude of nine hundred feet above the level of the sea. It is situated in a hollow, and is not seen until you enter its very street. There is nothing striking about the village, consisting of a long street of small buildings, mostly lodging houses, with here and there an hotel of more than ordinary pretensions. The country about is charming, affording extensive views in every direction, and a variety of scenery of the most pleasing character. It is not many years since this watering place was first brought to the notice of Americans. Confined chiefly to the visits of the Germans from the neighboring principalities the properties of its waters remained comparatively unknown; whilst now no spa enjoys a greater reputation for its tonic and invigorating powers. There are three sources from which the water is used for curative purposes; all partaking of the same general character but differing in the proportions of their ingredients—the Stahlbrunnen, Weinbrunnen and Paulinenbrunnen.

The composition of the first two is as follows:—

	Stahlb.	Weinb.
Carbonate of Lime, . . .	1.45	2.11
" Magnesia, . . .	0.88	3.12
" Soda, . . .	0.25	0.17
" Iron, . . .	0.75	0.83
Chloride of Sodium, . . .	0.34	0.18
Sulphate of Soda, . . .	0.21	0.16
Total of Solid Ingredients, . . .	3.83	6.57
Carbonic Acid, cubic inches, . . .	28	cubic in. 36

The Weinbrunnen is the spring most generally sought after. The taste of all three is pleasantly acidulous; clear, effervescent, and sparkling with carbonic acid gas, and of the temperature of 50° Fah. When heated for bathing the waters turn somewhat dark, and, as the "old man" says in his "Bubbles from the Brunnens of Nassau," they become "thick as a horsepond, and of the color of mullagitanny soup." It is said to discolor the skin, and even stain the linen after repeated bathing, but I did not find this the case. These waters, as will be seen, contain a large proportion of iron, and are, of course, highly prized for their chalybeate qualities. They are useful in all cases where sanguineous deficiency exists. Dr. Constantin James says, "I have seen, in Germany, springs where iron exists equal to those of Schwalbach; but I have nowhere seen it better held in solution." I translate further from the same writer, who, in enumerating the diseases for which these waters are recommended says: "Persons come here to repair their lost strength; young girls, pale and anemic, whose menstruation is painful and irregular;—women after tedious or protracted labor, and those suffering from uterine hemorrhage—young men worn out with the fatigue of business in large cities, as well as those who suffer from the abuse of mental labor

or dissipation, and are threatened in consequence with premature decay; also old men whose digestion is slow and laborious." The Schwalbach waters are recommended by European physicians to follow upon a previous course of a sedative or alterative character at other mineral springs. Dr. Sutro remarks of these springs: "their great amount of carbonic acid causes them to be well elaborated; they have been found most strikingly effective in the instance of invalids who have been subjected for a long time to tropical climates." "The rigid torpidity of the liver, and the obstinate alvine obstructions which refuse to yield to mercurials and cathartics give way here." The three sources are prescribed for daily external as well as internal use, the facilities for which are admirable, and upon the same plan as at Ems. Nothing can surpass the luxury of one of these baths taken at a temperature of about 24° Reau. or 86° Fahr. At immersion, a slight shock of coldness is experienced, but immediately a sense of the most agreeable warmth follows; the bubbles of carbonic acid gas, sent off by the heat, crackle and break on the surface of the body, exciting the skin and suggesting the idea of bathing in champagne. Like the Ems waters, these were formerly regarded to be very efficacious in sterility, and, so much were the effects dreaded by the *bourgeois* of Frankfort that they took the precaution to stipulate in their *contrats du mariage*, "*that their wives should not visit Schwalbach more than once during their married life, for fear of having too large a family.*"

Within an hour's drive of Schwalbach is another bathing place, worthy of a passing remark, called Schlangenbad or the Serpents' Bath, from the great number of serpents usually found in the source. This secluded spot lies nestled in one of the most beautiful valleys of the Taunus range, and its waters are supposed to possess remarkable virtues, the chief of which is to quiet and compose the nervous system of the most morbidly irritable patient. Its cosmetic qualities are peculiar, cleansing and beautifying the skin to such a degree even after a single bath, that many, particularly of the fair sex, are enticed thither for that sole purpose. The water is so clear and transparent that the body resembles a statue of the whitest marble, which makes one almost in love with one's self; as the "old man" in his "Bubbles" says, "I one day happened to overhear a short fat Frenchman in his bath exclaim to his friend, "*Monsieur, dans ces baigns on devient absolument amoureux de soi-même!*" It is stated that the snakes impart to the water the qualities they possess. They are of the temperature of 23° Reau. 84° Fah. and contain the "muriates and carbonates of lime, soda, and magnesia, with a slight excess of carbonic acid which holds them in solution."

There are two other German mineral springs not very far distant from those I have attempted to describe, whose waters are becoming every year more renowned, and are not altogether unlike in their ingredients and action—Hombourg and Kissingen. Ten miles from Frankfort, at the foot of the Taunus Mountains, encircled by wooded hills, lies the former of these places. It is the chief town of the limited principality of Hesse-Hombourg, is the seat of government, the residence of the Landgrave, and the headquarters of his formidable standing army of twenty-eight men, more or less. Its situation combines many advantages. Six hundred feet above the level of the sea, its atmosphere is cool and invigorating during the summer, and its surrounding walks and drives so numerous and diversified, that invalids are enabled to pass away part of their allotted time in agreeable rambles and excursions. It is only since 1844 that this town has grown into a first-class watering place, and it now ranks with most of the German spas, not only in the beauty of its locality, but in the value of its springs. It is yearly visited by a large number—many, no doubt, drawn thither by the attractions of its splendid Kursaal. Its waters are among the most important saline chalybeates, and are useful in diseases of the liver and stomach. There are four different sources, of which the Kaiserbrunnen (or Emperor) and Elisabethienbrunnen are the most frequented. They are quite cold, of

a pungent, saline taste; the latter not unlike our Saratoga Congress water. They create a sensation of warmth in the stomach and bowels, which is relieved by operation soon after drinking, and are decidedly purgative, without debilitating. Patients, on first arrival, are cautioned to begin with small doses, for fear of producing too great an effect. The waters are not used for bathing. With regard to the diseases met with at Hombourg, I cannot do better than translate again from Dr. C. James's book: "The cases most successfully treated here are affections of the abdomen, from simple dyspepsia to more serious functional derangement. There will be seen those complicated troubles so difficult to describe, which are characterized by a large appetite or the want of it, great flatulency, tension and fullness of the belly; sometimes a diarrhoea, an obstinate constipation, or one is succeeded by the other. To these symptoms are added a congested state of the vessels of the bladder and rectum. Over these troubles the Hombourg waters exercise the happiest influence." Among others who resort here are the morbidly corpulent, who soon run down their abnormal fat. Scrofula, in its protean forms, is found to be benefited; also gout and rheumatism.

The following analysis of the two sources is taken from Dr. Sutro's work:

	Elisabethien.	Kaiser.
Chloride of Sodium . . .	49.15	117.04
" Magnesium . . .	7.16	7.86
" Calcium . . .	7.75	13.32
" Potassium . . .	0.00	0.29
Sulphate of Soda . . .	0.38	0.00
" Lime . . .	0.00	0.19
Carbonate of Lime . . .	10.98	11.10
" Magnesia . . .	2.01	0.00
" Iron . . .	0.46	0.80
Silica . . .	0.31	0.38
Total . . .	108.20 gra.	150.98 gra.
Carbonic Acid—cubic in. . .	48½	55 cub. in.
Temperature (Reaumer) . . .	10°	11° (R.)

Two to four tumblers are taken in the morning, always upon an empty stomach, and the quantity may be increased to five or six. The purgative effect, after five or six mornings, passes off.

Kissingen is in the upper part of Bavaria, north-east of Wurzburg, not far off the line of the great Bavarian road from Frankfort to Leipsic. It is situated in the valley of the Saal, so called from the little stream which runs through it. The hills on each side are plentifully covered with luxuriant foliage, highly cultivated fields, and apple-orchards. The springs are surrounded by a grove of trees, laid out in parallel avenues, from which paths run out in every direction. Here, not far apart, under one enclosure, the famous waters of Radoczy and Pandur come bubbling up from different wells, furnishing a supply of the richest mineral springs in Germany. They have been examined by many chemists, and among them M. Liebig; but his analysis is so long and elaborate, that a copy of it would occupy too much space. He says of it, however, that "it will not fail to strengthen the confidence of physicians in the efficacy of these renowned waters: they are distinguished for their richness in the rarest ingredients which have, thus far, been found in mineral springs."

I take from M. Sutro's lectures the following analysis:

	Radoczy.	Pandur.
Temperature . . .	9° Reau.	8° R.
Carbonic Acid, cub. in. . .	26.25	28.85 cub. in.
Total solid ingredients in 16 oz. . .	85.74 gra.	76.39 gra.
viz.:		
Chloride of Sodium . . .	62.05	57.00
" Potassium . . .	0.91	0.25
" Magnesium . . .	6.85	5.85
Bromide of Magnesium . . .	0.70	0.68
Carbonate of Soda . . .	0.82	0.03
" Lime . . .	3.55	5.85
" Magnesia . . .	2.50	1.62
" Iron . . .	0.68	0.45
Sulphate of Soda . . .	2.00	1.75

Sulphate of Lime . . .	2.50	0.75
Phosphate of Soda . . .	0.17	0.05
Silica . . .	2.25	1.55
Oxide of Alum. . .	0.18	3.05
Organic Extract . . .	0.15	0.09
Loss, nearly . . .	0.38	0.37

Kissingen is not a hot place in summer; on the contrary, the thermometer rarely exceeds 85° Fah. According to Dr. Granville, a resident physician (who kept a record of the weather during many years), it ranges, during the months of July and August, between 51° and 65° Fah., in the morning, and between 65° and 80° in the afternoon. The atmosphere is generally clear and healthful, and it is considered, in every respect, a perfectly salubrious climate. Probably there is no spot more highly prized among Germans and Russians; the latter crowd here in great numbers, and members of the Imperial family frequently honor this little town with their presence. The King of Bavaria has done much to render this Spa one of the most desirable resorts in Germany; and every season now adds to its popularity and usefulness, bringing with it invalids from all parts of the world, seeking relief from complaints for which its waters are celebrated. The taste is not disagreeable; somewhat sharp, and slightly astringent. They produce in the mouth a tingling sensation, which lasts, however, only an instant. Their effect is, at first, laxative, but not nearly so much so as those of Hombourg. Sometimes they have a contrary tendency. Dr. Granville considers them "purgative and depurative, at first; afterwards invigorating and tonic." If we should believe the different writers on the Kissingen waters, there is hardly a disease to which "flesh is heir" that cannot be cured by them. There is no doubt that many affections of the digestive organs are greatly relieved, and it is said that "hepatic enlargements and passive abnormal congestions are also benefited." A very remarkable case is on record, as having been cured here, of hepatic induration, resulting from hepatitis, with symptoms of abdominal distention, obstruction, anorexia, emaciation, cedematous legs, and fever. Persons from India, with disease of the liver, and also patients slowly recovering from the effects of fever, are sent here by English physicians. Ladies suffering from derangements of the menstrual function, particularly those attending upon "change of life," are greatly improved by a three weeks' "course" at this place. The difference between Hombourg and Kissingen is not easily pointed out, as nearly the same class of patients are sent to both places. On this subject Dr. Sutro writes:—"The atmosphere of Hombourg, however bracing and invigorating for the weakened nervous system of the hypochondriac, is injurious to persons with irritable thoracic organs, and incipient or latent tuberculosis is quickly developed. At Kissingen, patients with the same morbid disposition find a beneficial influence produced on the organs of the chest; previous irritation is allayed, excessive mucous secretion diminished, and tubercular development retarded." With regard to diseases of the digestive organs, he remarks:—"Hombourg requires an uninjured digestive tube, but with obstructed abdominal circulation, and is contra-indicated in general atonic erethism, where Kissingen is recommended." Patients are required to bathe as well as drink, and daily baths of Pandur water, at about 90° Fah., accompany its internal use. Within an hour's walk up the valley is a source, called Soolen sprudel (boiling salt spring), which, at irregular intervals, bursts forth through an artesian well, sending up with great force a column of water to the height of eighty feet. Quantities of carbonic acid gas rise with it, which is made to serve the purpose of baths. The gas, by means of pipes, is passed into a building, and when required is conducted into a covered tub, in which the patient places herself, taking care to exclude the head. The application produces a sensation of warmth, and is agreeable. These gas baths are considered an *infallible remedy for infecundity*!

In enumerating the numerous virtues of the German

Spas, I must be permitted to diverge from their purely medicinal ones to touch, a moment, upon their characteristic features. One of the most striking is the great sociability of the assembled company. Difference in rank presents no barrier to an acquaintance; rich and poor, high and low, meet, for the time, on an equal footing. Courtesy and affability are universal, and pride and ostentation give way to an apparent desire on the part of all to add his or her share to the general content. Strangers from all parts of the world are to be met with, even to Turks, Greeks, and Moors, exhibiting every variety of costume, as well as shade of complexion; and their unintelligible jargon, to an American ear, furnishes an unceasing fund of wonder and interest.

There are always to be found, during the season, physicians of different nations, who are permitted by Government to give their services to those who need them. They are (particularly the English) men of intelligence and education, and, from long experience in the effect of the waters, are capable of giving reliable advice.

The course of waters prescribed is nearly the same at all the German baths; and it is astonishing with what alacrity and endurance the patient submits to the numerous privations required of him. At the hour of five or six A.M. the drinkers are aroused from their slumbers, no matter what the state of the weather, to hurry to the source. Receiving from the hands of the attendants (generally young girls) a glass of the sparkling beverage; they drink their prescribed quantum; walk briskly during fifteen or twenty minutes, and return for another glass, and so on, until the required dose is not only taken but digested. A light breakfast follows, and at ten A.M. the bathing commences—from that time until the primitive dinner hour (one P.M.) scarcely anybody is to be seen. The afternoon is devoted to exercise and excursions upon foot or on donkeys, until towards six o'clock, when the wells are again resorted to. Then, as during the morning, a band of native musicians, hidden among the trees in the vicinity, "discourse eloquent music," cheering and encouraging the water-drinkers in their daily potations. A plain, substantial supper closes the day. "Early to bed and early to rise" is the motto of every seeker of health, and half-past nine P.M. finds "all the world" at home and in bed.

It is amusing to watch the different parties as they succeed each other at the springs. A pale, emaciated anemic-looking girl slowly approaches, and languidly receives her glass; she is followed by a fat, good-featured matron, whose rubicund visage, dotted over with pustules of "acne rosacea," betrays at once what brought her there. Next an enormous specimen of abnormal fat, shaped somewhat like a man, comes waddling up; glass after glass he quaffs, seemingly confident that, after a "course" or two, he will be reduced to fair proportions. He, perhaps, is followed by a yellow-complexioned, melancholy dyspeptic; cross and ill-tempered, he shuns contact with his neighbors, swallows quickly his dose, and darts off in some by-path, where, alone, he can nurse his misery. And thus they come—the lame and the paralytic, the lean and the fat, the old and the young, all to receive new life from these fountains of health.

The "course" continues usually from three to four weeks, and strict rules and regulations are prescribed with regard to diet and exercise. After ten or twelve days, the first effect "of improved appetite, increased secretions of skin and urine, with free alvine discharges being passed," the patient begins to complain of certain new sensations. His appetite fails, flatulency and constipation ensue, and sleepless nights come on, all of which sour the temper and depress the spirits. The "critical reaction" is arrived—it is the period of "saturation"—the medical adviser is satisfied, reduces the dose, forbids the baths, and confidently predicts a "cure."

As to the accommodations at the Spas, the hotels and lodging-houses are comfortable, and the charges reasonable; and every effort is made to render the invalid and traveller

contented. The bill of fare is rather limited, as it is adapted to the use, chiefly, of the patients. Certain articles being sure to interfere with the internal use of the waters are proscribed; the food is, therefore, plain but wholesome.

The "kursaal" at most of these watering-places furnishes resources for amusement, and is the point around which the chief attractions congregate. It is supplied with reading and conversation rooms, saloons for concerts and balls, and, where playing is permitted and encouraged by Government, with gambling halls. On the exterior, spacious colonnades serve for the use of promenaders in wet weather, and in many instances lead by covered way to the "source" most resorted to.

SCHWABACH, NASSAU, August 1880.

APOPLECTIC PUERPERAL CONVULSIONS.— RECOVERY WITH HEMIPLEGIA.

BY

JOHN G. JOHNSON, M.D.,

SURGEON TO THE LONG ISLAND COLLEGE HOSPITAL.

On the 29th of December last, Mrs. D., a primipara, aged 17, consulted me for a severe pain on the right side of the head, accompanied with dizziness. A slight swelling of the left leg was also complained of. She was then within a month of her full term, and being of a delicate constitution, I did not deem it expedient to bleed her, but merely prescribed a mercurial cathartic, which so relieved the distress that no further treatment was necessary. On Monday evening (Jan. 22) I was summoned in great haste to see her, but not being on hand, Dr. Marvin kindly responded to the call. When I afterwards arrived at the house, I ascertained from her mother that labor pains commenced about noon, but they were so slight in character that it was not deemed necessary to send for me. About four o'clock, while the patient was sitting in a chair, she suddenly complained of dizziness and an intense pain in the head. Her husband laid her upon the bed, when she was almost immediately seized with a convulsion, while he was preparing himself to go for me. Dr. Marvin stated that on his arrival he found the patient lying completely insensible; her limbs flaccid; her breathing stertorous; the cheeks puffing out at each expiration; and the pulse exceedingly feeble. There was a mucous rattle in the throat, like that of approaching dissolution. Dr. M. had dilated the os from the size of a five cent piece to that of a dollar; it was soft, and still further dilatable. Bleeding of course was out of the question.

Immediate application of the forceps was deemed necessary, though neither of us supposed that the mother could live until the delivery should be completed. Considerable difficulty was experienced in applying the instrument at the superior strait, as the first blade would slip on attempting to introduce the second. I carried my hand well up, to be sure that nothing but the child's head was within the grasp of the forceps, and then by a careful rocking motion brought the head down a little. I was thus enabled to adapt the blades satisfactorily. The child was speedily delivered; it was still-born, and looked as if it had been dead for several days. The placenta was also delivered without any difficulty. The mother's condition during all this time remained unchanged. By Dr. Marvin's advice, I determined to make use of calomel in five grain doses. Accordingly the powder was mixed with syrup, and placed upon the back of the tongue, but a convulsion occurring soon after, the whole passed out through the nostrils. Another dose was in due time administered, which after a little while was swallowed. The remedy was given every half hour through the night. About twenty-six hours after the first dose was taken, involuntary greenish-colored evacuations commenced, when the remedy was discontinued. A certain degree of restlessness was evinced by a

thrashing of the right side and hand. A few drops of brandy and water were given by means of a swab, when the pulse began to increase in volume, and the mucous rattle to be somewhat less in the throat. She lay in this unconscious condition for sixty-two hours before she attempted to speak. As she began to improve, it was noticed that her face was drawn to the right side, that there was great difficulty in articulation, and that the left side was powerless. In consequence of her restlessness in constantly throwing off the bed-clothes, she was seized on Jan. 11th with an attack of pneumonia on the right side. This was treated by the daily application of dry cups; the stimulants being continued. Choraic movements were marked whenever she was spoken to, or was conscious of being gazed at. She recovered the use of the left foot, in about two months from the time of the first attack, sufficiently to walk cautiously about her room. Her mental faculties were very much impaired, particularly the memory. About the middle of April she was moved into the country, and at this time was able, with some assistance, to walk a short distance in the street. The left leg, however, was so weak that it would give out on the slightest over-exertion. The strength of the arm was in a measure regained. The application of electricity, which had been used previously, was continued. She visited Brooklyn about the 1st of July, when she could walk out alone; the arm, however, was slower in regaining its power. Her mental weakness still remained the same. A few days ago the husband called on me to state that though physically very much better, there was not much improvement in the condition of her mind. The case was of marked interest, from the feebleness of the pulse, a symptom which is very unusual in apoplectic attacks.

Reports of Hospitals.

LONG ISLAND COLLEGE HOSPITAL.

CRUSHING OF THE LUNG SUBSTANCE BY EXTERNAL PRESSURE UPON THE RIBS.

[Reported by R. K. BROWN, House Surgeon.]

JOHN GAYNARD, set. 39, native of Ireland. On Wednesday, 3 P.M., was engaged in excavating a sewer in Union street, South Brooklyn, when an immense mass of earth fell suddenly and buried him up to the nose. In twenty minutes he was dug out but did not reach the hospital until the further lapse of two hours. When admitted his face was pale, with an expression of anxiety; his respiration hurried, and he was expectorating dark venous blood. He occasionally spoke without being questioned, but with evident difficulty. His body was free from any marks of external injury. On placing the hand upon the chest, which was much swelled, an emphysematous crackling was very distinctly heard. Above the right clavicle there was a swelling, as from extravasated blood. On percussion no difference of sound was heard in the two sides of the chest; and on manipulating no bony crepitus indicative of a fracture was detected. On auscultation the respiratory sound was found to be almost completely absent from the left side, and a peculiar piping sound was heard on inspiration, when the ear was applied there, like that produced by air passing through a narrow channel. Respiration on the right side was normal, but the patient was short of breath; his pulse was frequent and small; his intellect unimpaired; skin slightly cool; no vomiting. Dr. Hamilton, who soon saw the patient, diagnosed a fracture of the ribs and puncturation of the lungs. Ordered small doses of brandy and morphia, but the emphysema soon extended and he died at 8 40 P.M., having survived the accident only a little more than five hours.

Autopsy, fourteen hours after death.—Present, Drs. Hamil-

ton, Gilfillan, and Browne. Body well nourished; very small abrasions above right clavicle and left side of inferior maxilla; very great emphysema, particularly of the trunk and scrotum. On percussion, chest was shown to be very tympanitic; no difference being noticed between the sounds elicited from the two sides, and no crepitus felt indicative of a fracture. Immediately on dividing the integument over the sternum, air escaped rapidly; muscles were red and well nourished. On raising the sternum the left lung was found collapsed. The mediastinal areolar tissue was infiltrated with air. On removing the heart and lungs entire 3 vi. of blood was found in left pleura, and about 3 viii. of bloody serum in the right.

On the left side the second, fourth, fifth, sixth, seventh, and eighth ribs were found fractured, the first about three inches, and the latter about four inches from the spine, *but the fragments were not displaced.*

The pleura costalis over the sixth rib was ruptured. The other ribs at the point of fracture had not wounded the pleura. There was a little infiltration of air between the costal pleura and the sixth and seventh ribs. On the right side there was a fracture of the first costal cartilage, near its junction with the ribs, and the fragments were displaced; the pleura costalis was lacerated. The heart was healthy. In the left lung, at the apex, towards the spine, was a discolored spot corresponding to the fracture of second rib. In the lower lobe at the middle of the dorsal surface there was a small triangular wound from which air and frothy blood escaped. The lung was much reduced in bulk and slightly crepitant. The lower lobe of the right lung, on the surface adjoining the middle lobe, was torn—possibly by handling. Along the back of this lobe was a coagulum of blood underneath the pleura pulmonalis which, on being cut into, flowed out and showed a *complete breaking down of the substance of two-thirds of the lower lobe.*

The whole of the right lung was very much congested and easily torn apart.

The abdominal viscera was healthy, but the stomach and intestines were much distended with gas.

Remarks.—The extent and rapidity of the emphysema were unusual, extending not only over most of the body but occupying the mediastinal space and even appearing under the pleura costalis and pulmonalis at certain points.

The left lung had been penetrated at two points and was completely collapsed, yet none of the broken ribs on this side were found displaced. The broken and displaced cartilage on the right side had not penetrated the lung. No other ribs upon the right side were broken, yet the lower lobe was literally crushed, showing to what an extent the ribs may bend without breaking. The bloody expectoration must have proceeded from the right and crushed lung, as the left was completely collapsed; life was therefore continued some hours with only the upper right lobe. *The crushing of the lung by the bending ribs was the peculiarity of the case.*

JOURNALS FOR SEPTEMBER.

THE CLEVELAND MEDICAL GAZETTE.—Sept.

ART. I. *The Physiology and Pathology of the Spleen*, by Dr. DAVID HUTCHISON, Mooresville, Ind. ART. II. *Vaccination*, by Dr. SAMUEL HART, Marietta, Ohio.—Describing a new instrument. ART. IV. *A Case of Poisoning by Strychnine*, by Dr. H. G. THOMAS, Alliance, Ohio.—The patient took five grains of strychnine, and in half an hour a large draught of whiskey; during this time he was under intense mental and sexual excitement; in an hour and three-quarters after taking the strychnine he was seized with spasms. Treatment: zinci sulph. ad lib. until free vomiting was effected, followed by tr. opii 3i. repeated in five hours, and cathartic the following day. The patient recovered. What effect had the alcoholic, mental, and sexual excitement in postponing the effects of the strychnine?

American Medical Times.

SATURDAY, OCTOBER 6, 1860.

TRIAL BY OUR OWN PEERS.

THE right secured to every man, under our constitution, of a trial by his peers, is one of the main bulwarks of civil liberty. It is a guarantee against any undue assumption of power on the part of the judiciary, and an assurance that the jury, before whom the trial is held, are equal in rank and interest to the litigants before them. This, then, is the theory underlying that great principle of equality before the courts, which our English ancestors, smarting under the misrule of their Norman conquerors, felt to be the compensating medium between diversities of rank in society, and to obtain which the inferior nobility of England extorted Magna Charta from their imbecile sovereign John.

But beautiful as is the idea of a trial by one's peers, and much as it may contribute to protect the weak against the encroachments of the powerful, it is found that, practically, the system does not always insure what in theory it promises. Differences in the mode of selecting jurors, differences in the qualifications exacted from them, and differences in the mode of conducting trials, have worked an almost entire change in the jury system, insomuch that it bears no resemblance whatever to the "trial by peers" as originally established and practised in ancient Britain. There, the jurors were emphatically the peers of the litigants. They were of the vicinage—some, doubtless, witnesses to the occurrences they were summoned to pass judgment upon; and all more or less familiar with the history of the case before them. Now, the reverse is precisely the condition of the jury system. No man familiar with the particulars of any case is considered entirely free from bias; no man who has witnessed the transactions forming the *res gestæ* of the issue at bar is considered qualified to sit as a juror; and, lastly, no care is taken, no concern is felt, no means are employed to secure to any man a trial by his legitimate peers.

Passing even by the sad revelations of venality which attend the trial by jury in our midst, where hordes of lazy, lounging, leprous loafers throng the halls of justice, anxious to serve as jurors at a shilling a case; where low, ignorant, disreputable men, foisted into high places, are intrusted with the determination of the most delicate problems in law, weighing rights and measuring responsibilities of whose essence or foundation they possess not the least idea—passing even by these things which cry out trumpet-tongued against the weakness of our jurisprudence, we wish to ask whether the time has not come for all to insist at least upon a return to such of the principles of the ancient rubric as shall insure a fair trial—as only one can be had—by a jury of one's peers.

Certainly no profession is, or can be, more interested in such a system of self-protection than the medical, and none has a better right to ask for reform in this direction at the hands of our Legislature. It is particularly the case when questions of a strictly professional character arise before our courts, as in suits for malpractice. There, the injustice of submitting the professional qualifications of a physician

to the arbitrament of a jury of ignorant, unintelligent men, becomes a blot upon the dogma of a trial at law. As well might you summon a jury of Chinamen to determine whether an American telegraph operator has sent a message over the wires correctly, as to summon a jury, such as is to be ordinarily found in our courts, to decide whether a certain medical man had or not been guilty of malpractice. The inequality of intelligence manifested in the framing of statutes, creating courts, and regulating the administration of justice, is lamentable enough, and it is still more melancholy to see judges adhere to the letter, while forgetting the spirit underlying all law. Perhaps, and we say it with regret, they do not understand the principle at all—they have never mastered it in fact—it is an unrevealed mystery to their eyes. They know the code, and naught beside, know its crossings, sinuosities, quaquaversal rulings, not knowing, at the same time, whether it is or not leading them astray from fundamental principles, not caring, perhaps, since their reputation is naught at the start, and continues so to the end. But however this may be, it is plain that we live under a constitution—that this constitution is recognised as the organic law, to which all other laws and statutes must conform. Now a fundamental principle in this instrument is to the effect, that every citizen shall be insured a trial by his peers. If he cannot be tried by them he cannot be tried by any one. If he can be tried at all he must be tried by them.

If we apply this principle to actual daily experience, we find that no such rule or canon pervades our jurisprudence. The idea is a purely constitutional one, but in practice no one recognises, no one applies it. A man has a right constitutionally, the courts deny it to him practically. He asks for the bread of an equitable trial, but only gets the stone of a customary farcical trial. And so we go on from day to day, bowing, submitting, embracing the old image, and yet cursing it at heart.

Physicians have an undoubted right to insist upon being tried by their own peers, and by them alone. And who are, who can be their peers, but physicians themselves? Who is so competent to weigh with intelligent appreciation the particular circumstances round which revolves the issue of a malpractice case? Can that ever be an impartial trial in which a jury are required to pass upon operations partly due to Nature, partly due to human skill or human ignorance—of which operations knowing positively nothing, they are still expected to comprehend so much, by a species of intuition, as to be able to syncope one class of effects from the other, and to decide when the shortening of a limb or an ankylosed joint, when injury of the crystalline lens, or induration of the tympanum, is due to natural causes, and when to malpractice? And yet there is never a trial for malpractice in our courts where juries, incompetent to understand the simplest questions in mechanics, are not called upon to resolve some of the most difficult problems in pathology and surgery. An individual, to be considered an expert, must have been experienced in the matters about which he is called to testify, but the jury who are to weigh the testimony of experts, and to decide when doctors disagree—they need know nothing. They are to be the judges of the competency and reliability of experts, and yet are not experts themselves! Was there ever such an absurdity—such an injustice as that perpetrated in the name of equity? Hence, in any suit for malpractice, a physician is literally summoned to appear and be

judged by a jury not of his own *peers*, but a jury of *foreigners*, who do not understand the language, the laws, or the results of medical practice, but simply guess at a verdict, and thus dispose of a man's reputation and property, leaving him shipwrecked and remediless. Such is the law, under which we, of the medical profession, live, move, and have our uncertain being.

When a clergyman is guilty of malfeasance in office, he is tried before an ecclesiastical council consisting of his own brethren, who are his own peers. When a lawyer is caught (few and far between the times) in open, flagrant dishonesty, he is tried by the court, not the jury, and dismissed or acquitted as the case may be—at all events he is tried by his own peers.

But when a physician is dragged into court on a charge of malpractice, is such tenderness, is such justice shown him? Could he obtain a trial by his own peers if he asked or if he claimed it as a right guaranteed him by the constitution? We can answer the question with a No. Not a court in the country would hearken to his prayer—not a judge but would sneer at the proposition, and his counsel would be overruled as an illuminist and a theorizer.

We think we have sufficiently shown that "there is something rotten" in the Denmark of our jurisprudence. We think we have shown why physicians are, of all men, the most virtually disfranchised before our courts; and until the proper steps are taken to insure reform in this particular, we do not feel that much encouragement can be given to young men to enter their ranks. We have only broached the subject at present, as one which ought to occupy the serious attention of the profession. We shall revert to it again, and point out what, it seems to us, would be a proper movement for the profession throughout the State to make, with reference to securing itself a larger measure of protection before the courts.

THE WEEK.

THE *N. Y. Examiner*, a religious paper, which aims at an influential position as a family newspaper, and which for the most part merits general confidence, amuses itself occasionally with the dangerous experiment of throwing stones at the glass house in which resides its neighbor of the *World*. The *Examiner* represents the strictest sect of orthodoxy, and is by no means tolerant of those practices not consistent with religious principles. The *World*, on the contrary, as its name indicates, is a true representative of the popular religion of our times, which wears a white cravat, and is punctual at church every sabbath, but enjoys worldly pleasures and worldly gains immensely through the week, driving fast bargains during the day, and attending in turn the theatres and operas at night. In the opinion of the *Examiner*, the *World* is a hypocrite, and of course a dangerous paper in its influences upon the homes of our Christian families. In its last week's issue the *Examiner* held the *World* up to public scorn and reprobation for presuming to the character of a religious journal, and yet admitting to its advertising columns theatrical advertisements, and concludes in the following pertinent strain:—

"Now if theatrical advertisements must go to the homes of Christian families, we say, let them be taken there simply as theatrical advertisements, and not by a messenger who professes to stand upon 'great primal Christian truths' in

their distribution. We cannot think that 'the time has come for a living Christianity' thus 'to assert itself.'"

Presuming, from the confident tone of the *Examiner*, that its advertising sheet must be a model for a religious journal designed for the homes of Christian families, we glanced down its columns, and what was our amazement to find them crowded, not with notices of theatres, the least dangerous of all possible advertisements to the morals of families, but with the most disgusting and demoralizing notices of diseases, and the quack preparations adapted to them. Here is "Dalley's Magical Pain Extractor" which is advertised to prevent and cure (in a list of thirty-eight different diseases), small-pox and cancer. Can the Editor of the *Examiner* plead ignorance of the utter and malicious falsity of this statement? Does he use Dalley's Pain Extractor to protect his own children from small-pox, or would he recommend a friend to try it? And yet he is willing to lend the pages of his professedly religious paper to introduce this bitter falsehood into "the homes of Christian families." And this paper the cunning charlatan selects *because* it is a messenger who professes to stand upon "great primal Christian truths" in the distribution of its advertisements. In an adjoining column of the same paper, under the startling title, "Health of American Women," appears the announcement of the Græfenberg Company, which we never fail to find in a paper professing to stand upon "great primal Christian truths" in the distribution of its advertisements. Is the Editor of the *Examiner* aware of the nature of the Græfenberg Marshall's Uterine Catholicon? Does he recommend it in his own family? Nay, dare he read that advertisement at his own fireside? We believe not.

Again, we have "Mrs. Winslow's Soothing Syrup for Children Teething." The advertisement says, very truly, "Depend upon it, mothers, it will give rest to yourselves and relief to your infants." Thousands of mothers in this city are annually relieved of all further care of their infants through the magically soothing effects of Mrs. Winslow's syrup, which the religious papers, as messengers who profess to stand upon "great primal truths in their distribution," introduce to the homes and confidence of Christian families. We commend to the careful reflection of the Editor of the *Examiner* the following extract from the City Inspector's last report, in regard to patent medicines and other effects upon the mortality of children:

"A very large number of children are killed annually, in this city, by *patent medicines*. They are exhibited without any knowledge of their properties, or their power to allay the symptoms for which they are given. I ask, how many hundred infants are destroyed by the various vermifuges alone that are advertised?—given to them with the idea that they are affected with worms, when, in reality, nothing of the kind exists in a large majority of cases. The symptoms that are taken to be indicative of worms are often those of teething, or the incipient stages of hydrocephalus or tabes-mesenterica, etc., which, by judicious treatment, might be cured. These nostrums never fail to coincide with the disease and aggravate the symptoms."

Will the Editor of the *Examiner* ponder this statement well, and estimate how many of the 15,000 children who died last year in this city may be chargeable to his account?

We shall not pursue this subject further at this time. We have given sufficient proof, that while the *Examiner* was zealously engaged in pulling out the mote in its neighbor's eye, a beam protruded from its own, so large

that nothing but the almighty dollar could conceal it from its own perception. If it desires to be a safe and reliable family newspaper, let the *Examiner* profit by the following statement:—*If quack advertisements must go to the houses of Christian families, we say, let them be taken there as quack advertisements, and not by a messenger who professes to stand upon "great primal Christian truths" in their distribution. We cannot think that "the time has come for a living Christianity" thus "to assert itself."*

Progress of Medical Science.

MATERIA MEDICA AND PHARMACY.

By EDWARD R. SQUIBB, M.D., OF BROOKLYN.

Cherry Laurel Water in the Treatment of Burns.—A writer in an Italian medical gazette recommends the use of cherry laurel water as a topical application to burns. It is applied by means of lint, and the dressings kept thoroughly moistened with it. This practice of Dr. Franchino appears to be rational, and well adapted to relieve the smarting pain and heat of the parts, based as it is upon the well known sedative effect of hydrocyanic acid—this hydrocyanic acid being doubtless the effective agent of the cherry laurel water. Dr. Franchino associates the dilute cherry laurel water with solution of gum arabic, but such admixture must be of doubtful utility, since the gum must be liable to coat the parts, and thus far protect them from the contact and sedative influence of the other agent, and must also be liable to cause adhesion of the compresses.

Those in this country who may desire to avail themselves of these good suggestions and practice of Dr. Franchino, may do so by diluting the official hydrocyanic acid with sixty to seventy parts of water—or say one ounce of the official acid (containing two per cent. of anhydrous acid) to half a gallon of water. One ounce of the official acid to twenty fluid ounces of water makes a solution of about the same hydrocyanic acid strength as good cherry laurel water. Such a solution, however, would not contain the essential oil which would be present in good cherry laurel water, and which would be effective in the treatment. A much better substitute for cherry laurel water, "*Aqua Lauro-cerasi*" of the Edinburgh and Dublin Pharmacopœias—or rather a preparation almost identical with it—may be made by distilling a pint of water from a pound of recent, well bruised wild cherry leaves, as shown by Prof. Procter of Philadelphia in a most able paper upon the wild cherry—*cerasus serotina*—published in the Proceedings of the Amer. Pharm. Association for 1858, p. 319 et seq. The portion of that paper relating to the substitute for cherry laurel water may also be found in the Amer. Journ. Pharm. for Sept. 1859, p. 423. It had been long known that water distilled from wild cherry leaves possessed poisonous properties, and after the experiments of Liebig, Wöhler, Garot, and Cap upon amygdalin, emulsin, etc., it became evident that not only the hydrocyanic acid but also the essential oil generated by the peculiar fermentation and distillation was almost identical when obtained from various allied plants—the almond, peach, cherry laurel, and wild cherry being of this family of allied plants. Neither cherry laurel water nor wild cherry water keep well unless carefully excluded from light and air, the strength diminishing with age and exposure. The preparations also vary somewhat in strength with the time of year at which the leaves are collected. The preparations are, however, easily made, and may with due care be easily preserved from one season till the next. Both this wild cherry water and the diluted hydrocyanic acid are well worthy a trial in the now so numerous cases of burns and scalds.

Creosote Water in Burns and Scalds.—Closely allied to the above is the use of creosote water for the same purposes. It, too, is applied by means of thin cloths, kept constantly wet. The solution is made in the proportion of six or eight drops of creosote to the fluid ounce of water, or, as recommended by Dr. B. F. Bache, of the U. S. Navy, somewhat stronger than this. Dr. Bache, whose long experience with this application gives him great confidence in its uniform good effect, adds the creosote to the water indefinitely, but in such proportion as to secure a saturated solution. After shaking, the excess of creosote soon subsides, when the solution is poured off for use, and fresh portions of water added, and shaken as before. It should be applied as early as possible, and very freely, since in common with the cherry laurel water, it is to the early or specific stages of the injury that the effects are prominently applicable. After suppuration is established, and the surfaces assume the character of ordinary sores, neither of these dressings are appropriate. In the early stages, however, the creosote water, in many cases at least, does very promptly and very efficiently relieve the pain and heat of the parts, so that frequently within two or three hours a degree of ease and comfort is obtained that is unusual in this class of injuries. And, when the character of the burn is of the first, or even of the second order of gravity, that is where the vitality of the superficial tissues is not destroyed, it is not uncommon to see the application of this remedy followed by a speedy resolution of the inflammation, and rapid recovery, and this to a degree and in a way not easily explained, either by the agency of the water, or the sedative effect of the cold kept up by change of dressings, evaporation, etc. In the use of this remedy it appears useless to annoy the patient and attendants with the disagreeable odor for an unnecessary length of time. Whatever good it is capable of accomplishing appears to be effected within the first twelve hours, or even within the first period of four hours, unless the resolution seems to be doubtful, when this or other antiphlogistic applications should be kept up for a longer time. Creosote water is very easily and speedily made, and keeps well for any length of time.

Curious Phenomena of Light.—Some two years since, the chemical world was astonished by experiments and statements of M. Niepce de Saint-Victor, showing that he was able, as he supposed, to store up light in the tissue of a sheet of paper so that the light would afterward manifest itself by its characteristic reactions upon nitrate of silver in the dark. A sheet of white paper impregnated with tartaric acid, or nitrate of uranium (neither of these chemicals being photogenic or susceptible to the action of light) was exposed to solar light, portions of its surface being covered or protected from the light by opaque objects. The paper was then taken to a dark room, and ordinary photographic solution of nitrate of silver applied to it. A negative picture of the opaque objects was the result, or the nitrate of silver was decomposed and darkened in these parts of the paper only which had been exposed to the light. Hence it was argued logically that the light had been stored up in those parts of the sheet which had been exposed to the source of light, since it had in those parts only exerted its chemical effect in darkening the nitrate of silver. More recently, however, a photographer, named Busk, has communicated to the Society of Blackeath, the results of some experiments which, if confirmed, surpass, in their wonderful character, those of Niepce de Saint-Victor, while they completely overturn his arguments, though in a measure confirming his facts. A sheet of white paper was impregnated with tartaric acid, dried, impregnated with nitrate of silver, again dried, and then had opaque objects laid upon it for a short time, all this having been done in the dark. Half an hour after the opaque objects had been removed from the paper, the paper remained perfectly white, and free from impression. It was then exposed to solar light, and a negative picture of the opaque objects was obtained. Thus the paper seemed in this instance to have stored up a latent image of the opaque objects, so that on being

exposed to the light, instead of being uniformly darkened all over the surface, as would have been naturally expected, it was so unequally darkened as to produce the outline picture of objects that the light had never struck upon. These two sets of experiments taken together are among the most striking and wonderful results of human research.

Good Chemicals for "the Fishes."—The following evidence of what may be reasonably expected from the "materia medica as now used" is extracted from "The Chemist and Druggist, a monthly trade circular" of London:

"Dr. Bewley wishing to kill a mangy cur, and having read in Magendie's 'Report on Strychnia,' that the sixteenth of a grain will kill the largest dog, determined to make sure of this very little animal by giving it about half a grain. But either Magendie's statement was incorrect, or the drug was adulterated, for at the end of ten minutes, the dog, though suffering frightfully, was not dead. Dr. Bewley resolved to put him out of his misery at once, and accordingly mixed half a drachm of prussic acid with a little milk and put it under the dog's snout. He lapped the milk with avidity, and in less than a minute vomited, got upon his legs, ran away, and recovered."

There is a ring of the right metal, namely, truth, about the circumstantial detail in this little story, and it unerringly directs the intelligent reader to a deduction that the doctrine occasionally inculcated from high places, that mankind would be better without a materia medica, is not likely to be without effect upon the manufacture and "trade" in articles of the materia medica, for it is a logical conclusion easily, and perhaps not unfrequently arrived at, that if it be better to have no materia medica, the next best thing is to have an inert materia medica—one that can do no harm.

Reports of Societies.

AMERICAN PHARMACEUTICAL ASSOCIATION.

(Continued from page 233.)

FOURTH DAY.—FRIDAY.

DISCUSSION ON NEW LAW FOR REGULATING THE SALE OF POISONS.

DR. SQUIBB remarked that the object of any law upon this subject was to control the use of poisons for murderous purposes. The difficulties, however, which lay in the way, had reference more particularly to the definition of poisons, and the placing of restrictions only upon such articles. The greater number of articles enumerated in the law, recently enacted for New York state, were not of a poisonous nature, and many had never been used either for the purpose of committing suicide or murder. This, in his opinion, was a very objectionable feature, and tended only to render the law inert. Again, some of the preparations, the sale of which were prohibited, were extensively used in the arts, and thus commerce was greatly interfered with. It seemed to him that the controlling power of the law should be exercised in the protection of the rights of persons who should be vested with the authority to sell such articles and then hold them responsible for their wrongs.

DR. SAMUEL R. PERCY, by special invitation, stated that he had worked as hard as he could to get a law enacted by the Legislature to control the sale of poisons, but the one now in force was greatly altered from the original one offered. It was proposed in the original Bill that every person who sold poisons should be regularly licensed, the object of which was simply that all such individuals should be known. The opposition to this proposition, and also to other portions of the bill, was very great, many alterations and additions were made, and even in that shape it would not have passed except by the strenuous exertions of Senator Rotch! The present law, notwithstanding it contained

only the two first sections of the one originally proposed was, in his opinion, a great improvement upon the one which had been previously in force. The object was not to control suicides but to prevent the commission of murder and abortion. It is now necessary that the name of the person to whom the poison is sold, with witnesses to the sale, be entered in a book for that purpose, and criminals knowing the danger of being identified afterwards would be deterred from committing the act. He knew of one such instance.

MR. PARRISH was in favor of such a general law as should control the free use of poisons if it could be carried out. He, however, along with Dr. Squibb thought that too many articles were enumerated. But after all the laws would be of no use except the community were blessed with conscientious apothecaries.

DR. A. K. GARDNER also made some remarks upon this subject in which he set forth the difficulties in deciding who were the legitimate medical practitioners, and also the necessity of having conscientious apothecaries.

MR. MEAKIM remarked that the apothecaries were the proper persons to settle the difficulties, and he had no doubt if, as a body, they took a stand in the matter, the public would second them in their endeavors to do what was right.

MR. CARNEY was of the opinion that the law upon this subject should impose restrictions only upon the sale of such poisons as were known to the public at large, and then the pharmacist would be relieved from all responsibility in the matter, and thus be afforded an opportunity of throwing himself upon the legality of the question when he had any doubts as to the propriety of the course he was to pursue. In his establishment he made it a rule never to sell any poisonous article except directed so to do by the prescription of a physician.

MR. PROCTER stated that there were two views to be taken into account in framing a law upon the subject of poisons. I. The protection of the public. II. The protection of the apothecary. In Pennsylvania the law names only arsenic, corrosive sublimate, prussic acid, opium, morphia, and strychnine; a register of the amount sold, date of sale, and the person to whom it is sold. The law also directs that the purchaser should be known to the vender, it does not, however, restrict the amount to be sold.

The resolution being duly presented before the Association and unanimously carried, the following gentlemen were appointed to serve as members of the committee:—Saml. W. Colcord, Boston; Wm. Procter, Jun., Phila.; W. J. M. Gordon, Cincinnati.

Mr. Gordon offered the following:

Resolved—That this Association tender their heartfelt thanks to the N. Y. College of Pharmacy, and the Druggists and Pharmacists of N. Y., who have contributed to their comfort and entertainment during the present session.

Accepted.

A Resolution in the following form was presented by Mr. Parrish, and adopted:

Resolved—That the Executive Committee be directed to forward copies of the Proceedings, including those of previous years, as far as practicable, to the various Pharmaceutical and Chemical Societies, and Colleges in this country and Europe, with requests for exchange.

The meeting then adjourned until half past 3 P.M.

FOURTH DAY—AFTERNOON SESSION.

After the transaction of business of minor importance, the question having reference to some change in weights and measures, for the new Pharmacopœia, was brought before the Association in the following form, by the Chairman of the Business Committee, Dr. Squibb:

Whereas—It is the judgment of this Association, that a change in the official tables of weights and measures is desirable and expedient;—and whereas it is understood that the final Committee of Revision and Publication of the United States Pharmacopœia have as yet come to no action upon this subject, Therefore—

Resolved—First. That it is expedient and proper for this Association, at this time, to offer its judgment upon this important subject.

Secondly. That the change of weights recently adopted in the committee of the council for consolidation and revision of the British Pharmacopœias,

by which change the table of avoirdupois weight is adopted, with a new division of the avoirdupois ounce into 480 parts, to be called grains, meets the approval of this Association, and is recommended for adoption into the National Pharmacopœia.

Thirdly—That this Association also recommends that in the writing of prescriptions the signs for ounce, drachm, and scruple, be abandoned in directing weights, and the number of grains, expressed in Arabic numerals, be used instead, preceded by the common abbreviation of the Latin word *grana*, and that the use of signs for ounces and drachms be restricted to indicate fluid measure.

These resolutions were taken up *seriatim*.

The first was unanimously adopted.

The second elicited a lengthy discussion and on being put to vote was lost by a decided majority. This being the case, Dr. Scibb, on behalf of the Business Committee, offered the following as a substitute:—

Resolved—That in the judgment of this Association it is expedient and practicable in the official formulas of the Pharmacopœia to abolish the use of measures of capacity; and to substitute for absolute weights and measures the term *parts*, meaning *parts by weight*, and that this Association recommends such a change as the most simple, practicable, and effective one that can be at present made.

Adopted.

The third resolution was withdrawn.

The Business Committee also offered the following resolution having reference to the restriction of Sunday trade:—

Whereas—This Association recognises the justice and propriety of the recent movements, in some localities, in regard to restricting the Sunday business of Pharmacœutists to certain definite hours, for very obvious good reasons, Therefore,

Resolved—That this Association heartily recommends the adoption of definite hours for the transaction of the necessary Sunday business; such hours to be determined by the co-operation of the Public, the Medical, and the Pharmacœutical interests of the various localities where these interests may combine to adopt the recommendation.

Adopted unanimously.

Mr. MAISON presented the following, which was also duly accepted:—

Resolved—That the thanks of the Association are due to the President, First Vice-President, Secretary, and Reporter for the efficient performance of their duties.

The minutes of the meeting were then read when, on motion of Mr. Stratton, the Association adjourned, to meet in St. Louis on the afternoon of the fourth Wednesday in August 1861.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

DR. ISAAC REMINGTON, President.

SEPTEMBER 12, 1860.

ABORTION—ITS CAUSES, DANGERS, AND TREATMENT.

DR. JAMES M. CORSE introduced the subject by remarking upon the distinction between the terms abortion and premature delivery. By abortion, he would mean the expulsion of the uterine contents prior to viability of the fœtus.

After some remarks upon the history of the subject, he considered the causes, dividing them into those belonging to the mother; those belonging to the ovum; external causes; and hidden causes. Under each head a large number of causes were mentioned.

In illustration of the disposition to the occurrence of this accident in certain cases, he quoted a case from Young, of Edinburgh, where the woman aborted thirteen times consecutively, and yet carried the next conception to term.

The premonitory symptoms are such as show death of the fœtus, or would evince the approach of disease, as hemorrhage, heat, coldness, heaviness. After abortion has commenced, it strongly simulates labor. The diagnosis, which is important, is made from the intermittent character of the pains, the discharge, and history of the case.

The prognosis is favorable when the affection is uncomplicated; guarded, when it is the result of great violence.

The treatment depends upon the causes, and was divided by the lecturer into preventive in the inception, and preservative when inevitable. For the first indication, causes, if possible, must be removed. Believing that a frequent cause was the existence of chronic metritis, or inflammation about the mouth and neck of the womb, he had employed

the appropriate remedies with great benefit. He would treat acute diseases as usual, but not employing emetics, cathartics, or mercury too freely. In his practice pneumonia had always produced abortion. Chronic and some uterine affections required palliation, but in case of a prolapse of the womb, regarding it as having a tendency to cause abortion from sympathetic irritation, he would relieve it by the employment of a very carefully adjusted pessary.

When, in a threatened abortion, the hemorrhagic discharge is slight, the patient should be kept absolutely at rest in the horizontal posture, and venesection resorted to in cases of plethora. In the event of a continuance of the hemorrhage, opium with astringents would be indicated, as well as the application of cold to the abdomen. If the bleeding is very free, the tampon made with pieces of sponge may be applied. Dr. C. did not view the colpeurynter with favor.

After the discharge of the ovum, danger exists until the complete expulsion of the membranes, hence these should be carefully removed by the use of the abortion forceps, or a long pair of dressing forceps. When a portion of the secundines remains in the uterus, it may continue a certain degree of vitality, increase in bulk, and be eventually discharged as a mole. If the membranes should adhere to the uterus, and prevent its complete closure, dangerous hemorrhage may result, and ergot will prove useful.

Where the woman has a double conception, one fœtus may die, and be discharged, and the other remain in perfect health until the close of gestation. When the cause is unknown, every deviation from health will require attention and careful medication, and to break up the effects of habit, the patient should be removed to a distance, and a complete change of all her surroundings made.

After some very general remarks upon the subject of criminal abortion, the speaker concluded by referring his hearers to the American Cyclopædia of Medicine and Surgery, subject Abortion, by Dr. I. Hays, for a very complete bibliography of this affection.

Dr. COATES remarked upon the importance of the subject in a medico-legal view, referring to its frequency, and the looseness of popular ideas concerning it. He mentioned the opinion of Desormeaux that the proper way to examine clots from the womb, in suspected cases, was by placing them in a basin, and passing a small current of water over them, and not separating them by employing the fingers for that purpose.

Dr. CORSE again arose, and asked whether the members regarded hemorrhage after the fifth month of pregnancy as harmless. He believed four and a half months to be the period of quickening, which he explained by the rising of the womb from its confinement in the pelvis, which, taking place suddenly, frequently caused a rupture to a greater or less extent of the adhesions at the mouth of the womb, and thus abortion might occur. He illustrated this by a case at the seventh month, where the hemorrhage continued for a day, and was then checked by astringents.

He also referred to the disputed point, as to whether females liable to abortion should take exercise, or observe absolute rest and quietude.

Dr. COATES regarded hemorrhage at any time as dangerous. If the menstrual discharge was the result of ovulation, he would have some difficulty to understand the phenomena of a female menstruating during pregnancy. He appealed to Dr. Corse to solve the problem, that an ovum could be discharged with a flux from the vagina while another ovum partially filled the uterus.

Dr. CORSE did not regard menstruation as the result of ovulation. He believed the latter process to be continually occurring.

Dr. COATES replied that in his youth the profession generally did not consider the menstrual discharge as blood, but a SECRETION. The idea of ovulation as its cause had come into vogue within the last fifteen years.

Dr. LAMB, in response to Dr. Corse's question, said that an extended experience had caused him to look upon hemorrhage in pregnancy as a serious matter, though

cases had occurred to him where repeated hemorrhage had taken place without any bad results. He made a distinction between hemorrhage with pain and that without. His treatment was absolute rest, and the horizontal position for a time; but when much pain was present, his prognosis was unfavorable, and his treatment active. He did not agree with Dr. Corse in the belief that abortions were most likely to occur about the time of quickening. Nor could he regard four and a half months as that period, for thus he had been led into error. He had observed quickening, or the first feeling of the motion of the foetus, to occur at from two and a half months to five, and he had learned to rely but little upon this motion or feeling.

In the treatment of plethoric patients he regarded moderate venesection as a *sine quâ non*. Cold applications to the abdomen and lower part of the spine, were prominent as remedies. Though many cases of abortion were decidedly serious in their appearance, yet in a practice of forty years, averaging for a greater part of that time ten obstetric cases per month, he had never lost a patient from abortion.

To show how long a foetus can be carried after its death, he related a case occurring in his practice, where, at the third month pain and considerable hemorrhage occurred. She was soon relieved, and returned to her business. At the usual time she believed quickening to have occurred, though no enlargement of the abdomen took place. At the eighth month he delivered her of a foetus perfect in every way, about three inches long, having the appearance of an alcoholic preparation.

DR. NEUBINGER referred to a case where he delivered a patient of twins, one of which was dead and partly decomposed. She was at full term, though the dead foetus appeared to be about at the seventh month, yet this dead child, during these two months, did not induce abortion. This he considered as an exception to the general rule. He objected to the belief that menstruation was independent of ovulation. To prove this point, he referred to an experiment made by himself upon a bitch during the period of heat. This excitement is of eighteen days' duration, and it is only during the latter half that the animal submits to connexion with the male. By careful observation, he noticed that about the twelfth day a discharge took place from the vagina, which doubtless was due to the great excitement of the organs of generation consequent upon the development of an ovum. At the eighteenth day connexion took place, and impregnation followed. This fact he quoted as proving the coincidence or connexion existing between the maturation of an ovum and menstruation.

He was much gratified at the opportunity afforded him of urging upon the members the importance of considering abortion as a criminal act. He remarked upon its increase in spite of the advance of civilization and religion, and its constant practice by every class. He believed the only way to prevent it was to instruct the female as to the fact that she is thus committing murder; that, from the very moment of conception the new being has life, and a claim for protection. This should be done in every case where the physician is requested to relieve a female of the result of sexual connexion. In the most earnest and emphatic manner, Dr. N. urged upon the members the moral duty they had to perform, and the good results likely to follow such a course. He was followed by

DR. HAMILTON, who mentioned a case of twins at full term, one of which was alive and of the usual size, but the other was much decomposed, and apparently had not passed four months. He had not been under the impression that quickening was a period of more danger than any other time, nor, if such were the case, he could not admit the explanation given, that it resulted from the disturbance occasioned by the rise of the uterus from the pelvic cavity.

His experience had furnished a larger number of dangerous cases about two and a half months after conception than at any other period. Though some such cases had lost so much blood as to be pulseless, and almost exsanguineous, yet none were lost. In these copious discharges he regarded,

as the most effectual remedy, the sudden dashing of cold water over the region of the uterus, thus causing a shock to the patient; after which nothing was so beneficial as opium in full doses, and if necessary, the free use of brandy. He placed much less reliance upon the acetate of lead.

On motion the Society adjourned.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, JUNE 27, 1860.

E. KRACKOWIZER, M.D., President, in the Chair.

SUDDEN DEATH FROM DRINKING ICE-WATER.

DR. FINNELL exhibited a stomach which was taken from an intemperate man 40 years of age. On the day of his death the patient had been much exposed to the sun, and suffered from headache. On returning home at night, being very much heated at the time, he drank a large quantity of ice-water and expired almost immediately after, while passing from one room to another. At the post-mortem examination the mucous coat of the stomach was found intensely reddened and covered by a thin layer of effused blood. About one ounce of serum was found in the arachnoidal cavity. The heart and liver were healthy. No water was found in the stomach. Dr. F. stated that the deceased had been drinking pretty hard for some time previous, but during the day of his death he was known to have been sober.

DR. CLARK remarked that it was difficult in this instance to associate the apparent cause with the effect. Hemorrhage from the stomach was common enough as the result of ulceration, cancerous disease, obstruction to the portal circulation, and the presence of a large quantity of "raw rum" in the cavity of the organ, but he had no recollection of the old cold water cases being attended with any such accident.

ANEURISM OF AORTA BEHIND THE AORTIC VALVES.

DR. FINNELL presented a second specimen of a heart removed from the body of a negro, aged 25 years, who up to the time of his death was apparently in the enjoyment of perfect health. He was found dead in his bed. The post-mortem examination of the body showed the existence of an aneurism of the aorta, the size of a walnut, just above the coronary arteries. The internal lining of the pouch was covered with small ulcerations, and the middle coat was exposed in many places. At one point an opening through the sac was discovered, which, however, was so small that it appeared like a mere slit. Atheromatous patches were found in abundance throughout the artery in the neighborhood. About two inches above the aneurism referred to, was another which was somewhat smaller in size, and presented on its internal surface also numerous points of ulceration. The small size of the opening led to the suspicion that the rupture occurred sometime in the afternoon, and when the deceased retired the accumulation of blood around the heart gradually increased to cause death. The pericardium was very much distended with clotted and fluid blood.

DR. CLARK remarked that specimens of small aneurisms situated behind the valves were occasionally presented to the Society, some three or four a year. Dr. Finnell had exhibited a considerable number, and he himself had shown several. Such cases, continued he, are always obscure so far as diagnosis is concerned. I have heard that a physician in town did diagnose one such case, but upon what basis I know not. I have never been able to. As a general rule I suppose that such cases never come under the observation of the physician. The disease is of such a character that the patient suffers no inconvenience from its presence, and is about his business until the death leak takes place.

DR. FINNELL stated that in most of the cases that had been presented to the Society, the rupture took place while the patient was engaged in some labor.

TUBERCULOUS DEGENERATION OF BRONCHIAL GLANDS.

DR. J. H. HINTON presented next a specimen of tuberculous degeneration of the bronchial glands with the following history: The patient was a child 3 months old, whom I saw but once before its death, the Saturday previous. It was plump and apparently well nourished, with rather a livid countenance which the mother stated had been the case ever since its birth; she also said that it had had considerable difficulty in breathing, and that for the past few nights it suffered from spasms. I regarded it as a case of cyanosis, from an open foramen ovale, and for the spasms ordered small doses of tincture of assafoetida. On Monday morning the mother called and said the child had died during the night, she did not know at what hour. The spasms had recurred, other than this there was nothing of special moment. I went to the house of the parents about noon and found the child in its grave clothes. By permission of the mother I made a section sufficiently large only to remove the heart. Upon introducing my fingers between the lungs to divide the vessels, they came in contact with an indurated mass—the bronchial glands—enlarged to about the size of a bantam's egg. These, together with the heart, a short portion of the trachea, and the bronchial tubes at their entrance into the lungs, I removed. Upon a close examination of the specimen no lesion of the heart was found; the foramen ovale was closed. As to the vessels I could not say whether these enlarged glands diminished their calibre or not. Division of the trachea and bronchial tubes showed a healthy condition of the trachea, and an ulcerated state of the right bronchus from its beginning to its entrance into the lung; the mucous membrane of the left bronchus was eroded. The glands are contained in a firm, dense capsule, and at the time of removal presented a very indurated feel. Upon dividing the capsule it presented a softened, cheesy, light oak colored appearance. A section was examined microscopically by Dr. Draper, and found to contain tubercle cells, and inflammatory exudation matter. The extension of this disease into the bronchial tubes, and the partial closure from inflammatory thickening, I think, must have been the cause of death.

DR. BIBBINS recollected a somewhat similar case that occurred to him while he was at the Nursery Hospital. The child was first attacked with slight dyspnoea, which finally grew worse, and death took place without a diagnosis being made. On post-mortem examination the only evidence of disease found was tubercular deposit in a bronchial gland, and one of the bronchial tubes was so circumscribed that its calibre was diminished fully one half. There was no other tuberculous matter found in the lungs or other parts of the body. The lymphatic glands in the neck were not enlarged.

DR. CLARK stated that tuberculous deposit in the bronchial glands, to the extent of producing suffocation and death, must be very rare. It was not, however, uncommon for such deposits to cause ulceration into the bronchial tubes and produce death by those means. Occasionally the existence of these deposits can be made out during life. Not long ago the daughter of a physician of this city was seized with a very violent attack of coughing, which, after lasting for many hours ended in the expectoration of a portion of tuberculous matter about as large as the end of the point of the finger. If I remember rightly a fortnight after this another paroxysm of coughing occurred, attended with the same result; a portion of tuberculous matter, somewhat smaller in size than the first, and a very little blood was brought up. At that time I was suspicious that the matter came from a cavity. Some months afterwards this child died of diphtheria, and, on post-mortem examination, tuberculous deposit was found in the bronchial glands. In several instances that I have had the opportunity of seeing, the cretaceous matter has already partly ulcerated through into the bronchial tubes, and yet has not made a complete discharge. In some of these instances cretaceous matter has been coughed up. Dr. C. did not think that the cause of death in Dr. Hinton's case was proven, on account of the difficulties which attended the post-mortem examination,

inasmuch as no opportunity was offered to see what other cause for death might exist.

DR. FINNELL recollected some time ago when he was engaged in making a collection of skulls of very young children, that in almost every instance the bronchial glands were more or less enlarged, and in most of these cases death took place from cholera infantum.

TUBERCULOUS DISEASE OF SUPRA-RENAL CAPSULES.

DR. ALONZO CLARK presented two specimens of tuberculous disease of the supra-renal capsules, which were taken, the Monday previous, from the body of a lady whom he saw in consultation with Dr. Halsted. Dr. Clark was only able to give an abstract of the history of the case. For several months the lady had been ill, the chief features of the disease being emaciation and occasional vomiting, with loss of strength, which exceeded that which could be easily accounted for by the loss of flesh. There were discolorations of very moderate extent upon the forehead occurring in irregular patches. There was no enfeeblement of the intellect. At the time Dr. C. first saw her there was in the site of a blister, that had been applied over the epigastrium some weeks before, an intensely black color. There was also a bronzed discoloration along the lower lip. All these discolorations continued until the end, although they varied very much in intensity during the course of the disease. In the investigation previous to death the idea was suggested that there was some disease of the supra-renal capsule present, but it seemed to Dr. C. that the discolorations were not sufficiently marked for the basis of such a diagnosis, and he pronounced them to be merely a variety of ephelis hepatica, dependent upon some derangement of the digestion—probably atrophy of the liver. The post-mortem examination showed that the conjecture as to the seat of the disease was verified. The two capsules were removed with perhaps an inch or an inch and a half of the upper portion of the kidney attached. These bodies possessed a thickness two or three times greater than natural, caused by the deposit in their substance of hardened and white matter. These masses were found to be tuberculous in their character. Dr. C. stated that during the life of the patient he had suspected the existence of tuberculous disease of the lungs. She had no cough, but he thought that the case might belong to that class where this symptom did not present itself. An examination was made with a great deal of care in order to determine that point, and no evidences of disease were discovered. At the post-mortem examination the promise having been given not to open the chest, and it being very desirable that the lungs should be examined, Dr. Halsted succeeded, by entering the chest through the diaphragm, in removing nearly the whole of the superior lobe of the right lung (which organ is most likely to be the seat of disease in this country). The portion was removed and cut up, when several calcareous grains larger than a mustard seed, but smaller than a raisin pit, were discovered throughout the mass, showing that there had been tubercles deposited. The only other point that was worthy of particular mention was the fact that the kidneys were diseased. Dr. C. was not aware that in the consideration of the lesions of the supra-renal capsule the existence of disease of the kidney had been taken into account, at all events it had not been sufficiently reported upon. It seemed to him worth while to learn what was the condition of the kidneys, and so he spent some time in a microscopic examination. The fibres of the structure were normal in quantity, the malpighian bodies were perfectly natural, which was also the case with the tubes in the pyramidal portion. But in the convoluted tubes scarcely an epithelial cell could be found. The larger of these cells were opaque from the accumulation of granular matter, and only here and there was a nucleus to be found. The liver appeared to be healthy. In the course of the disease the urine was frequently tested for albumen, but none was found. A few pus globules were found to exist under the microscope.

The Society then adjourned.

Correspondence.

DOMESTIC CORRESPONDENCE.

PHILADELPHIA.

Sept. 22d, 1890.

THERE is, among those engaged in Medical teaching in this city, some evident anxiety in regard to the influence of the continued political excitement on the size of the college classes for the coming session. Had not the Presidential campaign ensued so soon after the "abduction" into which so many were, last winter, deluded, perhaps but little influence from that remarkable event would now be felt. Although the excitement which started the *stampede* was confined almost entirely to one school, and particularly to those within the influence of certain ambitious aspirants for Southern professorships, it is thought by many that its influence will temporarily prevent some in the South from availing themselves of the superior advantages offered by the Medical Institutions of Philadelphia and New York. At the same time it is known that some who so hastily departed last season are now about returning. As yet the indications do not evince any falling off in the number usually present at this early season. In College Avenue—that favorite haunt for students and private teachers, where those from every Medical institution seem to meet on a neutral ground—the Lecture season has opened with the ordinary full attendance.

Our allusion to College Avenue will remind the Philadelphia graduates among your readers of an obscure but favorite locality, in which they have spent many laborious hours, and where, perhaps, much of their preliminary practical knowledge was acquired. For fifty years, or more, students have resorted to the place, and many who are now holding distinguished professional positions made their virgin efforts in some of its dingy and rude apartments, dignified with the names of lecture-rooms and amphitheatres. It has been particularly the chosen place for private anatomical study. The building occupied by the Philadelphia School of Anatomy has been used for its present purpose for about half a century, and was the field of labor of such as Godman, Grant, and Pancoast, and is now in the possession of Dr. Agnew, who has achieved there an unparalleled eminence as a private teacher, and gathers around him an anatomical class unequalled in numbers. Dr. Agnew is personally esteemed by students of all the institutions, and with his excellent and well illustrated lectures, and half a dozen demonstrators, rooms open during the entire year, and tables always well supplied with material, he is a formidable competitor with the departments of practical anatomy in the Colleges. The emoluments from his private establishment are probably equaled by the incomes from few professional chairs in this country, and his independent position must be one that he would not exchange for any but the highest and most lucrative of such places. There have been some attempts at competition with Dr. Agnew in private anatomical teaching, but such have resulted in failure, or have not succeeded in attracting remunerative classes. Other popular teachers of the different specialties, who begin their courses before the regular college sessions commence, are located in College Avenue, and as the lecture season seems to open in this locality, we have been naturally led to make some visits to it to obtain some evidences foreshadowing the prospects of a large class for the winter. A short time will now determine whether the infection of base fanatical politics will be allowed to contaminate those who have heretofore sought science where the facilities for imparting it are the greatest, and make them practise a self-denial which will, for the most part, but result in their own irretrievable loss.

SANAGRADO.

Medical News.

ARMY MEDICAL INTELLIGENCE.

STONE.—Assistant-Surgeon L. H. Stone has been ordered to proceed to Fort Randall, and relieve Assistant-Surgeon D. L. Magruder. The latter, on being relieved, has been directed to repair to St. Louis, Mo., and to report thence, by letter, to the Surgeon-General.

TEN BROECK.—The leave of absence heretofore granted to Assistant-Surgeon P. G. L. Ten Broeck has been extended until the 1st of January next.

APPOINTMENTS.

COLLEGE OF PHYSICIANS AND SURGEONS.—Foster Swift, M.D., as Lecturer Adjunct to the Professor of Obstetrics, in place of George T. Elliot, M.D., resigned.

NEW YORK MEDICAL COLLEGE.—R. K. Browne, M.D., as Professor of Physiology.

BELLEVUE HOSPITAL.—Mr. Henry M. Lyman, Mr. Heber Smith, Mr. C. A. Suydam, Mr. G. F. Ferguson, Mr. T. R. Whitney, Mr. L. Fisher, as Junior Assistant Physicians.

DEATHS.

HARRIS.—At Baltimore, Md., Sept. 29, Chapin A. Harris, M.D., in the fifty-fifth year of his age. Dr. Harris was born in western New York (Onondaga County), in 1806, and graduated in medicine in 1829, the practice of which, in a short time, he resigned, to devote himself exclusively to the science and practice of Dental Surgery. In this he had no equal. He raised that profession, both by his writings and example, far above the place it had up to this time held, through the neglect and ignorance of its practitioners; and by his continued efforts and his scientific developments he gave it an honorable position. To that profession he is thoroughly well known, both by his writings and by reason of the fact that, as chief of the Baltimore College of Dental Surgery, he was helped to instruct and form some of its most useful members. Dr. Harris was not better known, though more widely, for these labors and qualifications, nor more respected than he was for an amiable, kind-hearted disposition, and the most exemplary virtues of private life. His death is a loss to science, to his profession, to the community, as well as a calamity to his relations and friends.

EPIDEMIOLOGICAL RECORD.

NEW YORK.—Dr. N. C. Husted, of this city, writes: Intermittent fever is very prevalent on the north-western part of this island. The cause undoubtedly is owing to the frequent and severe changes in the weather, and the numerous excavations going on in that region.

THE YELLOW FEVER.—CASES AND DEATHS.—We have once more to give very favorable accounts in regard to the character of the *vomito* in our city and port. When it was generally expected that the recent rainy spells and change of weather would have proved fatal for yellow fever subjects, it has been just the reverse, and the change is visibly for the improvement of the sanitary condition of the city. The total number of cases from the 1st inst., to date (22d, 1 p.m.), has been 223, and only 25 deaths, or a trifle over 10 per cent, although this is always the worst month for yellow fever. If we add to these figures the cases and deaths up to the 31st August, it will be seen that the total number, from 1st January to 22d September, has been 2,702 cases, 364 deaths; making the percentage of deaths only 13½. The cases since the 14th inst. have been 96, and the deaths only 7—a proportion of less than 8 per cent, or but one death per day; and it is to be hoped that in our next number we will be able even to report a better condition of the sanitary affairs of the city.—*Cuban Messenger*.

THE Medical Colleges of Philadelphia commence their regular courses of lectures on Monday, Oct. 8th, with a general introductory in each school.

SHOEMAKERS die at the average age of 43 years; tailors at 42½; editors at 41; druggists, jewellers, and teachers at from 39 to 40; machinists at 38½, and printers at 36½. In other words, the members of these and other indoor occupations lose more than twenty years of life as compared with farmers, chiefly from want of pure air to breathe, being shut up during the day in close, unventilated shops, offices, and counting-rooms.

DEATHS FROM THE INFLAMMABILITY OF CLOTHING.—The total number of persons who died in the United Kingdom from burns and scalds during the year 1858 was 3,125. Of these, no small proportion met with their deaths by their clothes catching fire. Neither number nor rank is wanting to emphasize the sad calamities due to the habitual employment by ladies of light and combustible attire. This last week adds to the list of victims the Countess de St. Marsault, one of the Princess Clotilde's ladies of honor, who has just expired at Paris from the effect of burns which she had received while endeavoring to save another lady whose dress had caught fire at a ball.—*Lancet*.

THE HEAVIEST CHILD BORN ALIVE.—A writer in the *Medical Times and Gazette* says, "You were good enough a few weeks ago to publish in your Journal the details of the birth of, what I then believed to be, the heaviest child ever born alive, namely eighteen and a quarter pounds. Since then I have been informed by Mr. Davies, of Pershore, that he attended many years ago a woman who was delivered safely of a living child weighing nineteen pounds and two ounces. Forceps were employed to effect delivery, the labor (as may be supposed) having been very tedious; but both parent and child did well and are still living."

SIR B. BRODIE ON TOBACCO-SMOKING.—Sir Benjamin Brodie, from the rural retreat in which he awaits in darkness some lightening of his misfortune, now comes forward to discuss the use and abuse of tobacco. His active mind will not permit indifference to human interests, even in retirement: it is with him as with princes, whom Bacon likens to the planets, that have much veneration but no rest. The utterances of Sir Benjamin Brodie on a subject interesting the health of so many millions, and still hotly contested, justly receive great respect and carry great weight. His letter is marked by extreme moderation; this will certainly increase its influence. It brings no new facts or theories to our knowledge, but comments with acuteness and without exaggeration upon accepted truths. The powerful oil of tobacco—which destroyed life in the Boccacini case, which is a drug too severely depressing to be popular in medicine, in however small doses, and of which a drop will destroy the life of a cat—cannot circulate in the blood of the habitual smoker without producing decidedly injurious effects. This dictum is not open even to discussion. But, on the other hand, Sir B. Brodie concedes great weight to the arguments of the advocates of tobacco, who recall the fact that it belongs to the same class of nervous agents as alcohol, Indian hemp, the kava of the South Sea Islanders, the Paraguay tea, coffee, and even tea—products which are eagerly sought out by all the tribes of men in every part of the world, and universally consumed.—*Lancet*.

TO CORRESPONDENTS.

Query.—"Is there any method of treating an obstinate chordee preferable to that recommended in standard books?"—J. C. O.

Chicago.—The Medical Journals were duly received.

F. E. T.—The caustic recommended by Prof. Simpson, is composed of anhydrous sulphate of zinc and strong sulphuric acid stirred to a paste.

Student.—Bellevue Hospital is now open to students free of charge. You must, however, present your ticket of matriculation, as evidence of your being a student.

COMMUNICATIONS have been received from:—

Dr. CALER GREEN, N. Y.; Prof. JOHN ORDONIAUX, N. Y.; Prof. C. B. COVENTRY, N. Y.; Dr. W. B. ATKINSON, Pa.; Prof. LEWIS D. HARBON, Pa.; Dr. E. P. ALLEN, Pa.; Dr. J. G. WESTMORELAND, Ga.; Dr. O. HADLEY, N. C.; Dr. H. W. CLARK, Ind.; Dr. J. LADLEY, Va.; Dr. J. MOORE,

MICH.; Dr. D. LITTLE, N. Y.; Dr. H. O. HITCHCOCK; Dr. J. B. SMITH; Dr. J. AXLINE, O.; Dr. M. W. W. CHENEY, Mass.; Dr. A. D. TRACHOUT; Dr. HENRY OLIVER; Dr. J. P. DROMGOOLE, Miss.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 28d day of September to the 30th day of September, 1880.

Deaths.—Adults, 198; children, 339—total, 418. Infants under two years of age, 133. Among the causes of death we notice:—cholera-infantum, 19; congestion of brain, 9; infantile convulsions, 20; diarrhoea, 17; dysentery, 6; scarlet fever, 16; typhus and typhoid fevers, 9; of lungs, 11; small-pox, 2; infantile-morasmus, 39; infantile debility, 6.

SEPT.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	°	°	°	°	°			
28d.	30.04	.04	65	57	74	7	11	SW.	0 to 10	1m.
29th.	30.00	.10	70	62	78	5	8	SE.	4	
30th.	29.76	.13	66	57	78	6	7	W.	5.5	.98
1st.	29.97	.28	58	53	65	9	18	SW.	3	
2d.	30.12	.16	55	50	60	6	10	SW.	3	17
3d.	30.05	.10	52	43	60	8	11	NW.	3	
4th.	30.16	.15	47	40	53	7	11	N.	3	

REMARKS.—28d and 24th, sultry with light winds; the mornings of the 24th and 25th were foggy; 25th, wind fresh, with variable sky; squall of hail and rain accompanied with thunder, at 3 P. M.; 26th, fine; wind light A. M., fresh P. M.; 27th, wind light; rain P. M.; 28th, rain early A. M., wind fresh all day; 29th, fine, light wind all day; cloudy evening.

MEDICAL DIARY OF THE WEEK.

Monday, Oct. 8.	CITY HOSPITAL, Surgery, Dr. Peters, half-past 1 P. M.
	BELLEVUE, Obstetrics, Dr. Macready, half-past 1 P. M.
Tuesday, Oct. 9.	EYE INFIRMARY, Diseases of Eye, 12 M.
	COLL. PHYS. & SURG., Prof. Parker, Surgical Clinic, 11 A. M.
Wednesday, Oct. 10.	UNIV. MED. COLL., Prof. Metcalf, Medicine, 10 A. M.
	" " Prof. Post, Physiology, 11 A. M.
Thursday, Oct. 11.	Prof. Bedford's Clinic, 2½ P. M.
	CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P. M.
Friday, Oct. 12.	EYE INFIRMARY, Diseases of Eye, 12 M.
	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P. M.
Saturday, Oct. 13.	BELLEVUE HOSPITAL, Dr. Clark, half-past 1 P. M.
	COLL. PHYS. & SURG., Prof. St. John, Meteorology, 10 A. M.
Sunday, Oct. 14.	UNIV. MED. COLL., Prof. Dalton, Cranial Nerves, 11 A. M.
	" " Prof. Watta, Org. Special Sense, 12 M.
Monday, Oct. 15.	Dr. Detmold, Surg. Clinic, 2½ P. M.
	UNIV. MED. COLL., Prof. Bedford, 10 A. M.
Tuesday, Oct. 16.	" " Prof. Post, Surgical Clinic, 11 A. M.
	" " Prof. Bedford, Clinic, 2½ P. M.
Wednesday, Oct. 17.	" " Prof. Van Buren, Clinic, 8 P. M.
	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P. M.
Thursday, Oct. 18.	CITY HOSPITAL, Surgery, Dr. Peters, half-past 1 P. M.
	BELLEVUE, Medicine, Dr. Elliot, 1½ P. M.
Friday, Oct. 19.	UNIV. MED. COLL., Prof. Bedford, 10 A. M.
	" " Prof. Van Buren, Clinic, 11 A. M.
Saturday, Oct. 20.	COLL. PHYS. & SURG., Prof. Clark, Med. Clinic, 11 A. M.
	" " Dr. Bumstead, Venereal, 12 M.
Sunday, Oct. 21.	CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P. M.
	BELLEVUE HOSPITAL, Dr. Clark, 1½ P. M.
Monday, Oct. 22.	EYE INFIRMARY, Diseases of Eye, 12 M.
	COLL. PHYS. & SURG., Prof. St. John, Meteorology, 10 A. M.
Tuesday, Oct. 23.	" " Prof. Dalton, Cranial Nerves, 11 A. M.
	" " Prof. Watta, Org. Special Sense, 12 M.
Wednesday, Oct. 24.	Dr. Swift, Clinic, 2½ P. M.
	UNIV. MED. COLL., Prof. Metcalf, 10 A. M.
Thursday, Oct. 25.	" " Prof. Bedford, 11 A. M.
	BELLEVUE, Surgery, Drs. Parker and Wood, half-past 1 P. M.
Friday, Oct. 26.	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P. M.
	CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P. M.
Saturday, Oct. 27.	EYE INFIRMARY, Diseases of Eye, 12 M.
	COLL. PHYS. & SURG., Prof. St. John, Meteorology, 10 A. M.
Sunday, Oct. 28.	" " Dr. Conant, Anat. of Brain, 11 A. M.
	" " Dr. Bumstead, Venereal, 12 M.
Monday, Oct. 29.	UNIV. MED. COLL., Prof. Post, Clinic.
	N. Y. MEDICAL COLL., order of Lectures remain unchanged.

American Medical Times.

SATURDAY, OCTOBER 13, 1860.

ADDRESS TO MEDICAL STUDENTS.

IN this and the succeeding number of the *MEDICAL TIMES* we shall endeavor to present as complete an exhibit as in our power of the present condition of the Medical Colleges, the Public Hospitals and Medical Charities in the several States of the Union. The character and condition of these institutions constitute reliable indices of the educational and the popular status of the Medical profession in our country; and we feel assured that no physician or student can examine these records of the preparatory and the practical institutions of Medicine without feeling a just pride in the noble profession of his choice. Whatever the defects in the mode of education in some of our medical schools, the multitude of public instructors in their various departments; their valuable libraries, their cabinets and laboratories, and—best of all—their thousands of students and annual graduates, furnish unequivocal evidences of the spirit and progress of the Medical profession, while they clearly indicate the pleasing fact that popular sentiment and public necessity unite in demanding and sustaining these institutions, to the infinite chagrin of irregular and uneducated practitioners. All the hospitals and public medical charities in our land have ever sought the scientific and true, not the irregular practitioners of medicine, to administer the benefits of healing to the needy.

In connexion with the instructive details presented in these pages, we would invite attention for a moment to the mission, the duty, and the destiny of Medicine as a profession. To this subject we especially solicit the attention of the thousands of students and undergraduates who have just entered the portals of the temples of Medicine in the several States of the Union. We speak as to our younger brothers, believing that the sacred profession of our choice has a heaven-born mission and a glorious destiny, and that the unity of purpose which has always characterized "the true Church in Medicine," will eventually triumph over every obstacle that opposes the progress and the proper applications of sanitary science and the healing art.

The grand objects and design of our calling, and the preparatory and essential means necessary for fulfilling the great mission of the profession should be attentively considered by all who look forward to a life of usefulness and honor in its ranks. And what truer illustrations can be given of the real objects of Medicine, what clearer definitions of its mission can be found, than those which are embodied in the records and doings of its educational and its sanative institutions in this country? While it is confessed that of the latter we have not enough to meet the wants of humanity; and, of the former institutions, that we have a far greater number than can be properly sustained; it is equally true that the medical schools, which are so thickly planted from Maine to Louisiana and Kansas, have sprung up in consequence of the rapid progress and exalted demands of the healing art. And of the public services of

our profession, as such services are partially opened to popular observation in hospitals and dispensaries, how true is it that even those more publicly demonstrative works of Medicine do but very imperfectly illustrate the incessant charities, labors, and improvements that characterize medical life in its mission of mercy and skill.

The higher services of Medicine can never become attractive to the selfish, the indolent, and the vainly ambitious. Unlike either of the other learned professions, the most meritorious labors, the highest skill, and the brightest virtues of its members, do not attract or court public attention. The extended curriculum of scientific study in its schools; the patient investigations in anatomy, histology, microscopy, chemistry, and the whole range of the applied sciences,—in every department of human knowledge, and lastly, the physician's life of watchful anxiety in the sick-room, the hospital, and the private study, invite not the popular eye or the public ear, but are mostly known only to the Divine Father and to his suffering children, of which the gay and busy world takes little thought. "Eloquence gives spirit to the pulpit, gives spirit to the bar; but the Genius of Medicine sits pensive and alone, her finger on her lips, as if admonishing her votaries, by the example of her own silence, to bury deep within the recesses of their own bosoms the disclosures of the sick. Ours is a quiet profession." [*Dr. Jno. Watson's Anniversary Discourse.*] But if such is the unostentatious nature of our calling, its rewards, its privileges, and its works, are the noblest that can be allotted to man. In the language of the distinguished physician just quoted, "Medicine is something more than a profession." But it is not from any deficiency of interest or importance in the objects and labors of medical life that its deeds of heroism and humanity are not heralded to the world like the warrior's. Is valor the soldier's glory? The physician's is more than martial valor, and nobler; for a combination of most dauntless courage, the highest skill, and all the sacred sympathies of humanity, constitutes his crowning glory. No monument to the immortal Jenner casts its shadow, with that of the hero of battles, in Trafalgar Square, nor is the memory of our brethren who have fallen from pestilence perpetuated in granite and marble ostentatiously piled; but hundreds of millions of his fellow-creatures have received Jenner's priceless boon; and to the memory of those who fearlessly and fatally battled with pestilence, the *Alma Mater* of those noble sons in the profession inscribes over the catalogue of the fallen, "*Hæc mea ornamenta sunt.*"

If medical life thus call forth sympathies, sacrifices, and efforts unknown in other professions, its highest service also requires a wider range of knowledge, and a more continued and independent exercise of the nobler faculties than the other professions. All its labors are humane and refining; all its studies are ennobling, philosophical, liberalizing, and unsatiating. The science and the art are pre-eminently progressive, and they put under constant and ever-increasing contribution every department of human knowledge and every faculty of the mind and the soul.

If moral excellence and high mental culture are not the invariable and distinguishing characteristics of medical men and their pupils, it is because the mission and destiny of Medicine in practical life are not always properly appreciated. There are many in the ranks of practitioners and students of medicine whose lives and labors fail to answer the noble

design and destiny of the profession; but it certainly is surprising that the exceptional class is no larger; for few have entered the profession who have not found its objects, its obligations, and its sacrifices far greater than at first appeared. But we place too high an estimate upon the refining tendencies of medical studies to wish that a less number pursued them. Notwithstanding the derogatory and very severe censure and criticisms that were so gratuitously bestowed upon the students and the Schools of Medicine by some of our brethren at the last session of the American Medical Association, we still may point with pride to the excellent character and extended curriculum of all the *successful* institutions for Medical instruction in our country. As we have said before, all these schools—though needlessly numerous, and their modes of instruction too frequently defective, nevertheless strikingly exhibit the popular demand for an educated and progressive class of Medical practitioners in this country. To each of the forty-seven Medical colleges in these United States, we extend the hand of friendly greeting; and for the elevation, usefulness, and honor of our profession, we ask, in the name of all true physicians, that each shall inscribe over its portals, in letters of light, the significant words of the Father of Medicine—*Ἰατρὸς γὰρ φιλόσοφος, ἰσόθεος*. And as Plato caused to be written over the door of his Academy—“*Let none ignorant of geometry enter here;*” so upon the entrance to every Medical college, and the office of every private preceptor, should be inscribed the emphatic and decisive language—*No pupil who is ignorant of the Natural Sciences, or who is untaught in Letters, will be permitted to enter here.*

To the students gathered in the several schools of Medicine, the profession extends the hand of friendly and fraternal interest, and we would cheer you with words of encouragement and invitation to lay broad and sure foundations and diligently to prepare for the highest usefulness in your calling. We can assure you that as you advance beyond the portals of the temple of Medicine, you will be awed by the grandeur and extent of its design, the sanctity of its rituals, and the exalted spirit and purposes of its service. With an intimate knowledge of the complicated mechanism of the human frame, its delicate tissues, and their minutest elemental structures, their conditions and susceptibilities in health and in disease; and with a scientific knowledge of all the external agencies and influences of the natural world to which the living body is exposed, the physician is called to administer for the cure or the relief of all “the ills that flesh is heir to;” and, in addition to this he must minister to the mind diseased,—

“Fetter strong madness in a *silken* thread,
Charm ache with air, and agony with words.”

There is no sorrow, no distress, no physical or mental malady endured by his fellow-men, that the good physician is not called upon to cure or to alleviate. And to him also must the community and the State commit those profound scientific inquiries which relate to the causes of prevailing diseases, for by his gratuitous labors are those causes abated or prevented. Indeed, says Hecker, in his treatise on epidemics—“The State which founds its legislation on a knowledge of realities, has a right to demand from its physicians a general insight into the nature and causes of popular diseases.” Such is practical and preventive medicine. Its mission is to alleviate human suffering,

to heal the sick, to prevent disease, and preserve health; and, by its wide reach of science and skill, to preserve and strengthen all the faculties of the body and the mind, and thus to benefit and bless mankind. On such a mission and in such a field there will never be too many competent laborers, and there never can be too much of practical and scientific instruction.

MEDICAL COLLEGES OF THE UNITED STATES.

SESSION 1860-61.

IN this number we present the Profession with the first collection of the Medical Colleges of the United States which has ever been made. The material has been collated, as far as possible, from the college circulars; but in many instances we have been unable, in the limited time allowed us, to obtain these announcements, and have then been obliged to avail ourselves of such means of information as the medical periodicals of the country afforded. This is our apology for the imperfect notices of several schools. Notwithstanding these imperfections, this annual *coup d'a'il* of the Medical Educational interests of our country, which we now inaugurate, cannot but prove deeply interesting both to the Medical Students and the Profession of the United States.

ALABAMA.

MEDICAL COLLEGE OF ALABAMA, AT MOBILE.

The Lectures of this Institution commence on the 14th of November, next. The rooms for Practical Anatomy open about the middle of October. The appropriation of fifty thousand dollars by the State has enabled the Trustees to erect a magnificent building, complete in every department. The Museum of the College is not surpassed by any in the United States.

J. C. Nott, M.D., Surgery.
J. E. Heustis, M.D., Anatomy.
Wm. H. Anderson, M.D., Physiology and Pathology.
George A. Ketchum, M.D., Principles and Practice of Medicine.
F. A. Ross, M.D., Materia Medica and Therapeutics.
F. E. Gordon, M.D., Obstetrics and Diseases of Women and Children.
J. W. Mallet, Chemistry.
Goronwy Owen, M.D., { Demonstrators of Anatomy
A. P. Hall, M.D.,
H. D. Schmidt, M.D., Prosector of Surgery.

COLUMBIA (DISTRICT OF).

NATIONAL MEDICAL COLLEGE, WASHINGTON.

T. Miller, M.D., Emerit., Prof. Anat. and Phys. and Con S.
James J. Waring, M.D., Prof. of Obst. and Dis. of Women.
John G. F. Holston, M.D., Principles and Practice of Surg.
John C. Riley, M.D., Prof. of Mat. Med., Ther., and Hygiene.
Nathan Smith Lincoln, M.D., Anatomy and Physiology.
Robert King Stone, M.D., Clinical Surgery.
A. T. P. Garnet, Clinical Medicine.
George M. Dove, M.D., Practice of Medicine.
George B. Schaffer, M.D., Chemistry.
Wm. E. Waters, M.D., Demonstrator of Anatomy.

The thirty-ninth annual session of the National Medical College will begin on Monday, the 15th of October, 1860, and end on the first of March, 1861. The college and hospital are embraced under the same roof.

CLINICAL INSTRUCTION.—The Faculty have adopted regular daily clinics at the bedside of patients. Besides a large number of rooms for private patients, the infirmary contains the wards into which are received such patients as are placed under the care of the clinical professors of medicine and surgery, such as the transient paupers, occupying the forty beds supported by an appropriation from Congress,

the marine patients received through the custom-houses of Alexandria and Georgetown, and the poorer class of citizen patients who pay a small sum for their support. All medical students in the city have the privilege of attending gratuitously the clinical lectures.

GRADUATION.—The requisites for graduating are, that the candidate shall have attended the lectures of each professor two full courses, or one full course in this school, and one full course in some other respectable institution. He must have a fair moral character, and he shall have dissected during at least one session. He shall have entered his name with the Dean of the Faculty as a candidate for graduation, and delivered to him an inaugural dissertation upon some medical subject, thirty days before the close of the session, and passed a satisfactory examination. All persons who have attended two full courses of lectures in this school are entitled to attend succeeding courses free of expense. The degrees are conferred by the authority of the Columbian College, incorporated by an Act of the Congress of the United States of America.

FEES.—The entire expense for a full course of lectures by all the professors, \$90; single tickets, \$15; Practical Anatomy, by the demonstrator, \$10; Matriculating Fee, payable only once, \$5; Graduating expenses, \$25. No charge made for clinical lectures.

CONNECTICUT.

MEDICAL INSTITUTION OF YALE COLLEGE, NEW HAVEN.

Jonathan Knight, M.D., Surgery.
Charles Hooker, M.D., Anatomy and Physiology.
Worthington Hooker, M.D., Theory and Practice of Physic.
Benjamin Silliman, Jr., M.D., Chemistry and Pharmacy.
Pliny A. Jewett, M.D., Obstetrics.
Chas. A. Lindsley, M.D., Materia Medica and Therapeutics.

The annual course of instruction in this institution will commence on Thursday, September 23, 1860, and continue four months.

CLINICAL INSTRUCTION.—Medical and surgical clinics are held regularly every Wednesday at the Connecticut Hospital, and during the course a great variety of cases will be presented for consultation and operation.

ACADEMICAL LECTURES.—The students are entitled to gratuitous admission to the course of lectures on anatomy and physiology, given by Professor Knight, during the spring term, to the senior class in the academical department. They also have admission to the other lectures in the academical department, by paying the fees of the several courses.

GRADUATION.—Candidates for the Degree of Doctor of Medicine, are required to have attained the age of twenty-one years, to produce certificates of good moral character, to have attended two full courses of lectures in this or some other incorporated medical institution, and to have studied, if bachelors of arts, two years; otherwise three years, including the time occupied in attending lectures. At the examination, which takes place immediately at the close of the winter course, each candidate must present a satisfactory dissertation upon some subject connected with the medical sciences.

MEDICAL EXAMINERS APPOINTED BY THE STATE MEDICAL SOCIETY.—Ashbel Woodward, M.D., *Ex-Officio*, President. Timothy Dimock, M.D.; A. T. Douglass, M.D.; Samuel Beresford, M.D.; Joel Canfield, M.D.; William Woodruff, M.D.

FEES.—The fees which are required in advance, are, for each course (except obstetrics) \$12 50; Obstetrical course, \$6; Matriculation fee, \$5; Total, for full course, \$73 50; Graduation fee, \$15; Fee for a license (including diploma), \$4 50.

GEORGIA.

MEDICAL COLLEGE OF GEORGIA, AUGUSTA.

Henry F. Campbell, M.D., Anat., Special and Comparative.
L. A. Dugas, M.D., Surgery.

Joseph Jones, M.D., Chemistry and Pharmacy.
I. P. Garvin, M.D., Materia Med., Ther., and Med. Juris.
L. D. Ford, M.D., Medicine.
H. V. M. Miller, M.D., Physiology and Pathological Anat.
J. A. Eve, M.D., Obstetrics and Diseases of Women.
Robert Campbell, M.D., Adjunct of Obstetrics.
Robert Campbell, M.D., Demonstrator.
S. B. Simmons, M.D., Assistant Demonstrator.

THE TWENTY-EIGHTH COURSE OF LECTURES will commence on the first Monday in November next, with a general Introductory by Professor Joseph Jones.

CLINICAL INSTRUCTION.—The class have free access to the City Hospital, which is under the charge of the Faculty. Clinical Lectures are delivered in the Hospital twice a week. In addition to this, all the cases of interest, and surgical operations, in the Jackson-street Hospital, under the charge of the Drs. Campbell, will be brought to the notice of the class. Students who may desire practical instruction in Obstetrics, will find ample opportunities among our large colored population, and the Professor of Obstetrics, in every such case will superintend, and give the pupil practical instruction. No extra charge is made for clinical instruction.

LIBRARY.—The Library consists of over five thousand volumes of the most valuable and latest works on the various departments of medical science, besides beautiful plates, diagrams, etc., etc. Valuable additions of over two hundred volumes are annually made to the already extensive collection.

MUSEUM.—The College Museum is one of the most extensive, interesting, and valuable in the United States; and is continually receiving new contributions. A large and valuable accession of nearly three hundred specimens, anatomical and physiological, has been made in the addition of Dr. Joseph Jones' splendid collection.

FEES.—For the whole course, \$105; Matriculation, (to be taken once,) \$5; Practical Anatomy, \$10; Diploma Fee, \$30.

ATLANTA MEDICAL COLLEGE, ATLANTA.

Alexander Means, Chemistry and Pharmacy.
H. W. Brown, Anatomy.
John W. Jones, Prin. and Prac. of Med. and Gen. Path.
W. F. Westmoreland, Principles and Practice of Surgery.
Thos. S. Powell, Obstetrics.
Joseph P. Logan, M.D., Phys. and Dis. of Wom. and Child.
J. G. Westmoreland, Materia Med. and Med. Jurisprudence.

The Sixth Course of Lectures in this Institution will open on the first Monday in May, 1860, and continue until the last of the following August.

The MUSEUM, from almost daily additions, has so accumulated in the number of specimens that the Cabinets of Materia Medica and Mineralogy will be transferred to another room in the building, on the arrival of some valuable Pathological preparations, expected during the Winter or Spring.

The MEDICINAL GARDEN, in which much interest is felt, and which, from various disappointments, failed to be thoroughly furnished with complete varieties of plants during the past Spring, will be supplied during the ensuing Fall and Spring with every variety of indigenous and exotic medicinal plants that can possibly be procured.

CLINICAL INSTRUCTION.—From the operation of the City Dispensary in affording cases for the Clinic, it is thought advisable to continue it, and, in doing so, there will be ample facilities for clinical instruction. The time set apart for the exhibition and description of cases in Medicine and Surgery, will be regularly occupied, besides frequent Surgical operations that cannot be deferred to the regular Clinic hour.

GRADUATION.—The applicant for Graduation must be twenty-one years old, and of good moral character. He must have been engaged in the study of medicine the usual time required by other respectable Medical Colleges, under

the direction of a competent instructor. Two full courses of Lectures, in a respectable school of medicine are required; both in this, or one in this, and one in some other accredited Medical College. A Thesis on some medical subject, in the handwriting of the applicant, at least one month before the Annual Commencement. The Faculty reserve the right, in all instances, to revoke the Degree whenever satisfactory evidence is produced of irregular and unprofessional practices.

BENEFICIARY FOUNDATION.—In compliance with the terms of the Act of the State Legislature, appropriating money to the Atlanta Medical College, and for the benefit of meritorious young men requiring the means of obtaining a medical education, one Student from each Congressional District will be admitted to instruction in the Institution, free of charge, upon a recommendation from the Representative in the respective Districts.

FEES.—For the Course of Lectures, \$105; Matriculation (once only), \$5; Dissecting Ticket (required only once), \$10; Graduation, \$25.

SAVANNAH MEDICAL COLLEGE, SAVANNAH.

J. G. Howard, M.D., Emeritus Professor.
R. D. Arnold, M.D., Medicine.
P. M. Kollock, M.D., Obstetrics and Diseases of Women.
W. G. Bulloch, M.D., Surgery.
W. R. Waring, M.D., Anatomy.
Juriah Harriss, M.D., Physiology.
J. B. Read, M.D., Materia Medica and Med. Jurisprudence.
N. A. Pratt, M.D., Medical and Pharmaceutical Chemistry.
R. B. Harris, M.D., Demonstrator.

The annual course of lectures will commence on the 1st of October, 1860.

During the session of Lectures at the Savannah Medical College, Clinical instruction will be given twice a week, at the Savannah Hospital, *only by members of the Faculty of the Savannah Medical College*, upon a large number and variety of diseases, both medical and surgical. An Obstetrical ward is also well fitted up, to which students may have access, accompanied by the professor of this branch in our institution. The condition which accompanies the bountiful donation of the Legislature to the Savannah Medical College, will be most heartily complied with by the Faculty, viz.: that *one beneficiary from each Congressional District of the State*, shall receive a gratuitous education in this Institution. Applications for such position should be made to the Dean, on or before the 1st of October next, accompanied with good recommendations as to moral character.

FEES.—For entire Course, \$105; Matriculation Ticket (paid once), \$5; Dissection, \$10; Diploma, \$30.

OGLETHORPE MEDICAL COLLEGE, SAVANNAH.

H. L. Byrd, M.D., Principles and Practice of Medicine.
Holmes Steele, M.D., Obstetrics and Diseases of Women.
A. W. Griggs, M.D., Surgery.
William Hauser, M.D., Physiology and Pathology.
Hugh A. Blair, M.D., Anatomy.
B. L. Jones, M.D., Chemistry.
Franklin Dozier, M.D., Materia Medica.
V. H. Talliaferro, M.D., Emeritus Professor.
William T. Feay, M.D., Emeritus Professor.
William Bischoff, A.M., Botany.

The sixth annual session of lectures in the above institution will commence on Monday, the 5th day of November next. Preliminary lectures, free to all, will begin on the 22d of October.

CLINICAL INSTRUCTION.—Daily Clinical Lectures at the college by the Professors, and twice a week by the Attending Physicians of the Savannah Hospital.

BENEFICIARY FOUNDATION.—Young men of good moral character, whose pecuniary means are limited, and ministers (without denominational distinction) preparing for mis-

sionary labors, are hereby kindly invited to avail themselves of this foundation. This privilege will not be restricted to the State of Georgia, but will be extended to all the Southern States alike.

FEES.—For a full course of Lectures, \$105; Demonstrator's fees, \$10; Matriculation fee (paid once), \$5; Diploma fee, \$30.

MIDDLE GEORGIA MEDICAL COLLEGE, GRIFFIN.

L. L. Saunders, M.D., Surgery.
R. B. Gardner, M.D., Materia Medica and Therapeutics.
S. H. Saunders, M.D., Medical Jurisprudence.
F. O. Donnelly, M.D., Physio. and Pathological Anatomy.
L. J. Robert, M.D., Medical Chemistry.
E. F. Knott, M.D., Practice of Medicine.
F. M. Darnall, M.D., Obstetrics.
M. J. Daniel, M.D., Diseases of Women.

The Board of Trustees of the Middle Georgia Medical College announce that, acting under the requisitions of the charter for the said Institution, secured from the State Legislature during its last session, they have organized an institution not only planted upon *Southern soil*, but fabricated out of pure *Southern material*, and in every particular adequate to the demands of our Southern country. The number of teachers is ten; and the course five months.

CLINICAL INSTRUCTION.—A clinical lecture will be delivered daily at the College Hospital, where each pupil will receive practical instruction which is attainable through no other source.

BENEFICIARY.—One beneficiary from each Judicial District will be received, free of charge. The selection to be made by the presiding Judge of the District; and the application must be accompanied by a certificate from the same. Preference given to sons of deceased physicians.

GRADUATION.—Each candidate for the Doctorate must be twenty-one years of age and of good moral character. He must have attended two full courses of Lectures, the last of which must have been in *this* College. He must deliver to the Dean of the Faculty a thesis of his own chirography, on *thesis* paper, on some of the collateral branches of the science of medicine, accompanied with the sum of twenty-five dollars for his diploma. In addition to this he must bear a creditable examination before the Faculty.

The Session will commence on the *first* Wednesday in October, and continue *five* months.

FEES.—Matriculation ticket, \$5; Professors' tickets, each \$12; Practical Anatomy, \$10; Diploma, \$25.

ILLINOIS.

RUSH MEDICAL COLLEGE, CHICAGO.

Daniel Brainard, M.D., Surgery and Clinical Surgery.
James V. Z. Blaney, M.D., Chemistry and Pharmacy.
J. Adams Allen, M.D., Principles and Practice of Medicine.
J. W. Freer, M.D., Surgical and Microscopic Anatomy.
De Laskie Miller, M.D., Obstet. and Dis. of Wo. and Child.
A. S. Hudson, M.D., Physiology, Pathology, and Clin. Med.
W. B. Herrick, M.D., Emeritus Professor.
Ephraim Ingals, M.D., Mat. Med. and Med. Jurisprudence.
R. L. Rea, M.D., Anatomy.
Edwin Powell, M.D., Demonstrator.

The Annual Course of Lectures for the session of 1860-61, will commence on Monday the 5th of November, and continue sixteen weeks. A Preparatory Course, during October, will be given at the College without additional charge.

GRADUATION.—1st. The candidate must be twenty-one years of age, and give satisfactory evidence of possessing a good moral character. 2d. He must have pursued the study of medicine three years, and attended at least two courses of lectures, one of which must be in this Institution. Four years of regular and continued practice will be considered equivalent to one course of lectures. 3d. He must have attended clinical instruction during, at least, one

College term. 4th. He must notify the Secretary of the Faculty of his intention to become a candidate, and deliver to him a thesis on some medical subject, written by himself, on or before the first of February, and at the same time deposit the graduation fee, which, together with the thesis, will be returned to him in case of withdrawal or rejection. 5th. Every candidate must undergo a full and satisfactory examination on all branches taught in the College. 6th. Graduates of other respectable schools of medicine will be entitled to an *ad eundem* degree, by passing a satisfactory examination, paying the graduation fee, and giving evidence of a good *moral and professional* character.

CLINICAL INSTRUCTION.—The means of Clinical teaching are abundant. A Medical and Surgical *Clinique* will be held weekly at the College; students will have access to the Marine Hospital, and regular instruction will be given for nine months of the year in the City Hospital. The opening of this institution will, for the first time, afford to the indigent sick care adequate to their wants, and to Medical Students a field of sufficient extent for ample observation, and in the attendance upon which they will not be exposed to typhoid and infectious diseases, which often endanger the health. The building erected by the city is capable of containing 200 beds, and arranged in the most perfect manner for securing the health and comfort of the inmates.

FEES.—Lecture Fees, \$5 per ticket, \$40; Dissecting Ticket, \$5; Hospital Ticket (each \$5) \$5; Matriculation Fee (paid once), \$5; Graduation Fee, \$20. The Lecture Fees must be paid in *advance* by all except those who have previously attended two full courses, one of which has been in this Institution.

MEDICAL DEPARTMENT OF LIND UNIVERSITY, CHICAGO.

David Butler, M.D., Emeritus.
J. H. Hollister, M.D., Descriptive Anatomy.
H. A. Johnson, M.D., Physiology and Histology.
A. L. McArthur, M.D., Materia Medica and Therapeutics.
M. K. Taylor, M.D., General Path. and Public Hygiene.
F. Mahla, Ph. D., Inorganic Chemistry.
Edmund Andrews, M.D., Surgery and Clinical Surgery.
Ralph N. Isham, M.D., Surg. Anatomy and Oper. of Surg.
W. H. Byford, M.D., Obstet. and Dis. of Women and Child.
N. S. Davis, M.D., Prin. and Prac. of Med. and of Clin. Med.
F. Mahla, Ph. D., Organic Chemistry and Toxicology.
H. G. Spafford, Esq., Medical Jurisprudence.
Horace Wardner, M.D., Demonstrator.

IOWA.

IOWA STATE UNIVERSITY—MEDICAL DEPARTMENT—KEOKUK.

D. L. McGugin, M.D., Phys., Path., and Clinical Medicine.
Freeman Knowles, M.D., Obstetrics and Gen. Therapeutics.
J. C. Hughes, M.D., Surgery and Clinical Surgery.
Philip Harvey, M.D., Medicine and Microscopy.
Wells R. Marsh, M.D., Chemistry and Materia Medica.
Daniel Meeker, M.D., Anatomy.
Henry Strong, A.M., Medical Jurisprudence.
D. C. Dewey, M.D., Demonstrator.

The eleventh regular Course of Instruction will open on Thursday, the first of November next, and continue until the following March, six Lectures daily.

REGULATIONS.—Each Student is required, within one week after the opening of the session, to pay the fees, and procure his Matriculation Ticket. Candidates for Graduation, 1st. Must be twenty-one years of age, and present testimonials of good moral character. 2d. Must have attended two full courses of medical lectures, the last at the Medical Department of the Iowa University, or, evidence of four years' respectable practice will be considered as equivalent to one course. 3d. Must have studied medicine three years (including lecture terms), under the direction

of a respectable medical practitioner. 4th. Must furnish a satisfactory medical thesis (original and in his own handwriting) to be delivered to the Dean, at least four weeks before the close of session, accompanied by the receipt of Treasurer.

CLINICAL INSTRUCTION—COLLEGE INFIRMARY.—This, in immediate connexion with the College building, and under the direction of the Faculty, is capable of accommodating one hundred patients. The cases here presented for advice and operation, by the professors of Clinical Medicine and Surgery, form one of the important features in this Institution, and every student may equally enjoy its advantages free of charge.

COUNTY ALMS HOUSE.—This Institution, in the vicinity of the city, will be open once each week for the admission of Students, where they have opportunities of observing disease in all its chronic forms.

FEES.—Fee for the entire Course of Instruction, \$15; Matriculation Ticket, \$5; Demonstrator's Ticket (optional), \$5; Hospital Tickets, *gratuitous*; Graduation fee, \$30.

KANSAS.

BAKER UNIVERSITY—MEDICAL DEPARTMENT—LEAVENWORTH CITY, KANSAS.

J. F. Smith, M.D., Anatomy.
Practice of Medicine.
M. S. Thomas, M.D., Principles of Surgery.
H. Griffin, M.D., Materia Medica and Therapeutics.
F. Sinks, M.D., Chemistry and Toxicology.
G. W. Hogeboom, M.D., Med. Jurisp. and Sanitary Science.
J. L. Weaner, M.D., Clinical and Op. Surgery.
C. J. Lee, M.D., Clinical Medicine.
C. A. Logan, M.D., Obstetrics.

KENTUCKY.

UNIVERSITY OF LOUISVILLE—MEDICAL DEPARTMENT—LOUISVILLE.

Benjamin R. Palmer, M.D., Surgery.
J. Lawrence Smith, M.D., Medical Chemistry.
Robert J. Breckenridge, M.D., Mat. Med. and Therapeutics.
Joshua B. Flint, M.D., Clinical Surgery.
Theodore S. Bell, M.D., Theory and Practice of Medicine.
Llewellyn Powell, M.D., Obstetric Medicine.
J. W. Benson, M.D., Anatomy and General Physiology.
S. M. Bemiss, M.D., Med. Jurisprudence and San. Science.
D. W. Yandell, M.D., Clinical Med. and Path. Anatomy.
Archie B. Cook, M.D., Demonstrator of Anatomy.

The Medical Department of the University of Louisville will enter upon its Twenty-Fourth Annual Session on the first Monday in November. The Session will close, as heretofore, on the last of February.

PRELIMINARY COURSE.—Lectures, preliminary to the regular course, will be delivered by the several Professors, at the University and City Hospital, commencing on Monday, October 1, and terminating on Saturday, November 3.

CLINICAL INSTRUCTION.—There will be three clinics held weekly in the Amphitheatre of the University, a surgical clinic on Saturday, by Prof. Palmer, and two medical clinics weekly, by Prof. Yandell. The surgical wards of the City Hospital will be under the charge of Prof. Flint, who will also deliver lectures on clinical surgery, at that Institution, twice weekly during the entire session.

MUSEUM.—The Museum has been fully restored, and will be found to be rich in the materials for illustration. In the departments of anatomy, human, comparative, and pathological, the collections of specimens, models, and preparations, is extensive and varied.

LIBRARY.—The Library belonging to the Department contains nearly four thousand volumes, carefully selected.

GRADUATION.—1. The candidate for the degree of *Doctor of Medicine* must have attained the age of twenty-one years, and sustain a good moral character. 3. He must have attended two complete courses of lectures, the last of which

shall have been in this Institution. 3. He must also have taken the ticket of the Demonstrator one session, or been engaged in dissections under a competent teacher; and must have attended one course of clinical instruction in the Louisville Marine Hospital, or some other institution approved by the Faculty. 4. Students who have attended a full course of lectures in a respectable medical school, and physicians who have been engaged for four years or more, in reputable practice after a regular course of study under a preceptor, are admitted to examination in this school after attendance upon one complete course. 5. Candidates, at the time of applying to the Dean for admission, are required to exhibit their tickets as proof of their compliance with the above rules, and to produce a thesis on some medical subject composed by themselves. In event of withdrawal or rejection, the thesis and graduation fee will be returned to the candidate. 6. The voting on the case of each candidate is by private ballot, and if there be three negative votes he will be rejected, the Professors of Clinical Surgery, Medical Jurisprudence, and Sanitary Science not voting.

FEES.—The fee for admission to the entire course of Lectures is One Hundred and Five Dollars, payable, as are all the fees, in advance. The matriculation ticket gives the student the use of the extensive library of the Institution during the winter, and is Five Dollars. The graduation fee is Twenty-five Dollars. The fee for admission to the Dissecting-rooms and for instruction by the Demonstrator of Anatomy, is Ten Dollars.

KENTUCKY SCHOOL OF MEDICINE.

Benjamin W. Dudley, Emeritus Professor.
H. M. Bullitt, Theory and Practice of Medicine.
John Hardin, Obstetrics and Clinical Medicine
C. W. Wright, Medical Chemistry.
N. B. Marshall, Materia Medica and Therapeutics.
Middleton Goldsmith, Surgery and Clinical Surgery.
W. D. Stirman, Anatomy.
George W. Bayless, Physiology and Pathological Anatomy.
David Cummins, Demonstrator of Anatomy.

TRANSYLVANIA UNIVERSITY—MEDICAL DEPARTMENT—LEXINGTON.

Benjamin W. Dudley, M.D., Emeritus Prof.
Robert Peter, M.D., Chemistry and Pharmacy.
James M. Bush, M.D., Anatomy.
William S. Chipley, M.D., Theory and Practice of Medicine.
Ethelbert L. Dudley, M.D., Principles and Prac. of Surgery.
Samuel M. Letcher, M.D., Obstetrics and Dis. of Women.
Henry M. Skillman, M.D., Gen. and Puth. Anat. and Phys.
Benjamin P. Drake, M.D., Mat. Med., Med. Juris. and The.
Samuel L. Adams, M.D., Demonstrator.

LOUISIANA.

UNIVERSITY OF LOUISIANA—MEDICAL DEPARTMENT—NEW ORLEANS.

James Jones, M.D., Practice of Medicine.
J. L. Riddell, M.D., Chemistry.
Warren Stone, M.D., Surgery.
A. H. Cenas, M.D., Obstetrics.
Gustavus A. Nott, M.D., Materia Medica.
T. G. Richardson, M.D., Anatomy.
Thomas Hunt, M.D., Physiology and Pathology.
S. E. Chaille, M.D., }
W. C. Nichols, M.D., } Demonstrators.

The Annual Course of Lectures in this department will commence on Monday, the 12th of November, 1860, and terminate in March, 1861. Preliminary Lectures will be delivered daily in the Amphitheatre of the Hospital, from the 1st of October, on Clinical Medicine and Surgery and other subjects, without any charge to students. The College is endowed by the State.

MUSEUM.—The Museum of Anatomy is extensive. The

preparations are chiefly works of scientific artists in England, France, and Italy.

CLINICAL INSTRUCTION.—The Act which established the University of Louisiana, gives the Professors of the Medical Department the use of the Charity Hospital as a school of practical instruction. There are about 750 cases usually in the wards of the Charity Hospital. The Professors visit every morning, between eight and ten o'clock, the Medical, Surgical, and Obstetrical wards, prescribe and make Clinical remarks. In New Orleans the student can visit patients in the Charity Hospital from morning until night, and devote his talents and industry to the study of every disease in the wards. He can question and examine for himself, that he may the better learn, and resolve his doubts of knowledge. Members of the classes of the Medical Department have gratuitous admission to the Hospital, and to all Lectures in the Hospital. Attendance on cases of Labor in the Obstetrical wards is provided for by the Professor of Obstetrics, from among the candidates for Graduation.

GRADUATION.—1. The candidate must be twenty-one years of age, of moral character, and must have studied medicine three years. 2. He must have attended two full Courses of Lectures, the last of which must have been in this institution. 3. He must write a Thesis on a Medical subject, and present it to the Dean one month before the close of the session. 4. He must be examined by the Faculty.

FEES.—For the tickets of all the Professors, \$110; for the ticket of Practical Anatomy, \$10; Matriculation, \$5; Diploma, \$30; fees for tickets required in advance.

NEW ORLEANS SCHOOL OF MEDICINE.

Erasmus D. Fenner, M.D., Theory and Practice of Medicine.
Austin Flint, M.D., Clinical Med. and Medical Pathology.
Anthony A. Peniston, M.D., Anatomy.
Austin Flint, Jr., M.D., Physiology and Microscopy.
Samuel P. Choppin, M.D., Clinical and Operative Surgery.
Cornelius C. Beard, M.D., Surgery and Surgical Pathology.
D. Warren Brickell, M.D., Obstet. and Diseases of Women.
Isaac L. Crawcour, M.D., Chemistry and Medical Jurisp.
Howard Smith, M.D., Materia Medica and Therapeutics.

The regular term of Lectures in this Institution will commence on Thursday, the 15th day of November, 1860, and terminate in the latter part of March, 1861. Lectures preliminary to the regular term will be given in the amphitheatre of the Charity Hospital and at the College about the middle of October. Daily instruction at the bedside in the wards of the Charity Hospital will also be given during the preliminary term. The Lectures, etc. during this term, however, will not conflict with the courses during the regular session.

CLINICAL INSTRUCTION.—The Professors of the School of Medicine, by legislative enactment, are included among the Visiting Physicians and Surgeons of the Charity Hospital. Medical students are at liberty to visit the wards at all times. There are no restrictions to their visits on every day of the week and at any period of the day. The wards of the hospital are always accessible, and without any fee. Medical students also have access to the Eye Infirmary of Professor Beard, and the surgical infirmary of Drs. Choppin and Schuppert. Important surgical operations and the treatment of surgical affections may be witnessed at these institutions, which are in successful operation. In addition to these advantages the Faculty have organized a Free Dispensary in the college building, where, on three days of the week, the amplest opportunity is afforded for studying practically the art of Diagnosis, together with the prescribing and compounding of medicines.

GRADUATION.—The requirements for graduation are a good moral character; three years of medical study under the direction of a reputable practitioner of medicine; attendance on two full courses of Lectures in a regular and accredited Medical School—one of which must have been in the New Orleans School of Medicine; an acceptable

thesis on some subject connected with medicine, and a satisfactory examination on all the branches taught in this college. Satisfactory evidence of having been for four years engaged in regular practice, will be considered as equivalent to a course of Lectures. In conferring the degree of Doctor in Medicine, the Faculty reserve the right to revoke it in the case of any graduate who may become engaged in irregular practice, or who, by unprofessional or immoral conduct has forfeited his claim to be recognised as a worthy member of the profession.

FEES.—The fees for a full course of Lectures, are \$108; the Matriculation Fee (required but for one course) is \$5; the ticket of the Demonstrator of Anatomy is \$10; the Graduation Fee is \$25.

MAINE.

MEDICAL SCHOOL OF MAINE.

Wm. Sweetser, M.D., Medicine.
Charles A. Lee, M.D., Materia Medica.
A. Norse, M.D., Obstet. and Dis. of Women and Children.
Hon. John S. Tenney, LL.D., Medical Jurisprudence.
Edmund R. Peaslee, M.D., Surgery.
Paul A. Chadbourne, M.A., Chemistry and Pharmacy.
David S. Conant, M.D., Anatomy and Physiology.

The course of lectures for 1860 will commence on the second Thursday of February, and continue sixteen weeks. The Medical School of Maine, by an Act of the Legislature, is placed under the superintendence and direction of the Boards of Trustees and Overseers of Bowdoin College. By the joint authority of these two Boards all the degrees of M. D. are conferred.

REGULATION.—Pupils, who have attended two full courses of Medical Lectures, one of which has been at this School, are admitted to all subsequent courses, without payment of any lecture fees. Students, who have attended two full courses at other regular Medical Institutions, are required to pay one third of the usual fees for admission to their first course of lectures at this School, in addition to the Matriculation fee. Students, and particularly candidates for a degree, are examined either daily or weekly on the subjects of the lectures. The examinations for the degree of Doctor of Medicine are held by the Faculty of Medicine at the close of the Course of Lectures, and also on the second Monday before the annual commencement of the College; which occurs on the first Wednesday of August. The candidates must have devoted three years to their professional studies under the direction of a regular practitioner of medicine. They must have attended two full courses of Medical Lectures in some regular, incorporated Medical Institution, and the last course previous to examination must have been at this Medical School. They must deposit with the Faculty satisfactory certificates of having pursued their Medical studies for the required term, and of possessing at the time of examination a good moral character. They must also pass a satisfactory examination in anatomy, physiology, surgery, chemistry, materia medica, pharmacy, obstetrics, and the theory and practice of medicine. They must also read and defend a thesis or dissertation on some Medical subject, in the presence of the Faculty of Medicine. As the Faculty adhere to and teach, as the foundation of all true Medical science, those great and leading principles, which have borne the test of time, and have the support of the highest and best authorities; none, whose views and principles are found to be radically at variance with these, can be recommended by them for a diploma. Those candidates, who have not received a collegiate education, must satisfy the Faculty of their proficiency in the Latin language and in natural philosophy. Degrees are conferred at the close of each course of Lectures, and at the annual commencement of the College in August. A fair copy of the thesis or dissertation must be deposited with the Secretary of the Faculty at least ten days before the commencement of the examination at the close of the lectures. These copies are preserved in the

Medical Library; and it is required, that they should be written on letter paper of medium size, with a wide margin, left for the purpose of binding them into volumes.

LIBRARY.—The Medical Library, attached to this School, is one of the best in the United States. It contains about 3600 vols., principally modern works, which have been selected with much care; and is annually increasing. It embraces the works of all authors of standard authority, with the leading Medical and Surgical Journals, both American and European. All the Members of the Medical Class are entitled to borrow two volumes a week from the Library. Those, who are candidates for examination for the degree of M. D. during the year, are permitted to exchange their books twice a week, thus giving them the privilege of consulting four volumes each week.

CLINICAL INSTRUCTION.—Frequent opportunities will be afforded to the class of witnessing surgical operations. All operations in the presence of the class are performed without charge. Any patient, who prefers, can thus be operated on, without expense. All such persons whose wounds may require subsequent dressings, it is expected will be visited by the Professor of Surgery or by Medical Students of advanced standing, for this purpose, free also of charge, should they be in the immediate vicinity of the College. Ether or chloroform inhalation will be administered to prevent pain, at the option of the patient, in all operations requiring their use. The Surgical Clinique is attended on Saturday mornings. Patients may present themselves on Friday, P. M.

FEES.—For all the lectures, \$55, payable in advance; graduation, including diploma, \$18; Matriculation, or Library fee, \$5, payable but once.

MARYLAND.

UNIVERSITY OF MARYLAND, BALTIMORE.

Nathan Smith, M.D., Surgery.
Wm. E. A. Aikin, M.D., Chemistry and Pharmacy.
Samuel Chew, M.D., Practice of Medicine.
G. W. Miltenberger, M.D., Obstetrics and Dis. of Women.
Wm. A. Hammond, M.D., Anatomy and Physiology.
Edward Warren, M.D., Materia Medica and Therapeutics.
Geo. Farnandis, M.D., Demonstrator.

Fifty-third session of this institution will begin on Monday, October 15, 1860.

CLINICAL INSTRUCTION.—The Baltimore Infirmary, containing one hundred and fifty beds, is under the *immediate control* of the Faculty, and daily instruction is given at the bedside by the Professors of Surgery and of the Principles and Practice of Medicine. A limited number of Students will be permitted to reside in the Institution, as Clinical Assistants, and no candidate can receive his degree unless he produce evidence of his regular attendance at the Hospital.

FEES.—Professors' Fees, \$90. Matriculation Fee, \$5. Demonstrator's Ticket, \$10. Diploma Fee, \$20.

MASSACHUSETTS.

HARVARD UNIVERSITY.—MASSACHUSETTS MEDICAL COLLEGE, CAMBRIDGE.

D. Humphreys Storer, M.D., Obstet. and Med. Jurisprud.
John B. S. Jackson, M.D., Morbid Anatomy.
Henry I. Bowditch, M.D., Clinical Medicine.
Oliver W. Holmes, M.D., Anatomy and Physiology.
George C. Shattuck, M.D., Theory and Practice of Med.
Henry J. Bigelow, M.D., Surgery.
John Bacon, M.D., Chemistry.
Edward H. Clarke, M.D., Materia Medica.
Richard M. Hodges, M.D., Demonstrator.

The Annual Course of Medical Lectures in this Institution will commence on the first Wednesday in November, 1860, at the Massachusetts Medical College, Boston, and continue four months.

The Medical Course of Harvard University comprises two Sessions, viz., the Winter Session of Medical Lectures, as advertised above; and also a Summer Session, extending from March to October inclusive. During the Summer Session instruction is given at the College, by the Professors, upon all the branches on which Lectures are delivered in the winter. Lectures during the Summer Session are also given in the University on Comparative Anatomy, by Professor Wyman; in Botany, by Professor Gray; in Zoology, by Professor Agassiz; and in Acoustics and Optics, by Professor Lovering. To these lectures, gentlemen of the Medical Class are admitted without extra charge.

CLINICAL INSTRUCTION is given throughout the Session by the Professors, at the Massachusetts General Hospital, adjoining the College.

FEES.—Matriculation (paid once only), \$3; for the Winter Course, \$80; for Graduation, \$20; for the Summer Session, \$100.

BERKSHIRE MEDICAL INSTITUTION, PITTSFIELD, MASS.

Henry H. Childs, M.D., Obstetrics and Diseases of Women.
E. K. Sanborn, M.D., Surgery.
Timothy Childs, M.D., Anatomy.
Henry M. Seely, M.D., Chemistry and Toxicology.
R. Cresson Stiles, M.D., Physiology and Pathology.
Wm. P. Seymour, M.D., Materia Medica.
W. H. Thayer, M.D., Theory and Practice of Medicine.
Jas. D. Colt, Esq., Medical Jurisprudence.

The annual course of lectures begins on the first Thursday in August and continues sixteen weeks.

CLINICAL INSTRUCTION.—The weekly Clinique, for the treatment of medical and surgical cases, continues through the term. Students will have access to the Library, Museum, and Cabinet without extra charge.

FEES.—For the full Course of Lectures \$50. For those who have already attended two courses at regular incorporated Medical Schools, \$10; Matriculation Fee, \$3. Students who have attended two full courses at this institution may attend a third course on the payment of the matriculation fee alone. Graduation fee, \$18; Library fee, \$1.—Doctors of Medicine are admitted to the lectures without fee.

MICHIGAN.

UNIVERSITY OF MICHIGAN—MEDICAL COLLEGE—ANN ARBOR.

Zina Pitcher, M.D., Emeritus Professor.
Abram Sager, M.D., Obstetrics and Physiology.
M. Gunn, M.D., Surgery.
A. B. Palmer, M.D., Thera. Mat. Med. and Dis. of Women.
C. L. Ford, M.D., Anatomy.

The annual session commences on the first day of October, and continues until the last Wednesday of March. Four lectures are delivered daily. Previous to each lecture the students are carefully examined upon the subject of the preceding lecture. The total number of lectures in the term will thus be between six and seven hundred. In addition to this, the class is divided into sections for examination of various tissues of the body by means of microscopes; so that each student has repeated opportunities for becoming familiar with the minute structure of parts, and also the practical working of the instruments.

To be admitted to the degree of "Doctor of Medicine," the student must exhibit evidence of having pursued the study of Medicine and Surgery for the term of three years with some respectable practitioner of medicine (including lecture terms); must have attended two full courses of lectures, the last of which must have been in the College of Medicine and Surgery of the University of Michigan, and the previous one in this or some other respectable institution; must have been engaged in the study of practical anatomy; must be twenty-one years of age; must have submitted to the Faculty a thesis composed and written by himself on some medical topic, and have passed an ex-

amination, at the close of the term, satisfactory to the Faculty.

FEES.—\$2 for parchment of diploma.

MISSOURI.

ST. LOUIS MEDICAL COLLEGE, ST. LOUIS.

M. L. Linton, M.D., Principles and Practice of Medicine.
A. Litton, M.D., Chemistry and Pharmacy.
Charles A. Pope, M.D., Surgery and Clinical Surgery.
M. M. Pallen, M.D., Obstetrics and Diseases of Women.
W. M. McPheeters, M.D., Materia Medica and Therap.
Charles W. Stevens, M.D., Gen. Descrip. and Surg. Anat.
John B. Johnson, M.D., Clin. Med. and Path. Anat.
J. H. Watters, M.D., Physiological and Med. Jurisprudence.
E. H. Gregory, M.D., Demonstrator.

The ensuing Course of Lectures will commence on Thursday, the 1st of November next, and continue until the following March. Preliminary lectures will be delivered at the College during the month of October, as also Clinical lectures at the hospitals and dispensary.

GRADUATION.—1. That the candidate be twenty-one years of age, of good moral character, and have been engaged in the study of medicine for three years (courses of lectures included). 2. That he shall have attended two full courses of lectures in this Institution. Attendance on a regular course in some respectable and generally accredited medical school, or four years of reputable practice, will however be considered as equivalent to one of the courses above specified. The Dissecting Ticket must also have been taken at least one session in this or some other school. He must also have followed the practice of a Hospital. 3. That he shall undergo a satisfactory examination on all the branches taught in this college, and write an acceptable thesis, either in the English, Latin, French, or German language, on some subject connected with medicine. 4. That he notify the Dean, in writing, of his intention to become a candidate by the 1st of February, and deliver to him his thesis, accompanied by the graduating fee; which shall be returned, along with the thesis, in case of withdrawal or rejection. Graduates of other respectable schools are admitted to the lectures on the payment of the matriculation fee only.

FEES.—The Fees for the whole course (paid in advance) amount to \$105. The Matriculating Ticket (paid but once), is \$5; that of the Demonstrator, \$10. The Hospital Tickets are gratuitous, and the Graduating Fee is \$20.

MISSOURI MEDICAL COLLEGE, ST. LOUIS.

John S. Moore, M.D., Theory and Practice of Medicine.
John Barnes, M.D., Materia Medica, Therap. and Med. Bot.
John T. Hodgen, M.D., Anatomy.
E. S. Frazer, M.D., Obstetrics and Diseases of Women.
Joseph N. McDowell, M.D., Surgery and Surg. Anatomy.
Thomas McMartin, M.D., Pathology and Clinical Medicine.
G. M. B. Mangles, M.D., Chemistry and Physiology.
L. T. Pimm, M.D., Adjunct of Surgery.
John J. McDowell, M.D., Demonstrator.

The regular Lectures at this Institution will be delivered in the city of St. Louis. They will commence on the 1st of November, 1860, and will be continued until the 1st of March, 1861.

Primary Lectures will be delivered at the College, by the Professors, on the subjects connected with their respective departments, and daily Clinics will be delivered at the Hospital.

GRADUATION.—Three years' study, including two courses of lectures, or reliable evidence that the applicant has been reputably engaged in practice for three years, and has attended a course of lectures in this institution, will be required of all who wish to graduate.

FEES.—For a full Course of Lectures, \$105; for Graduation, \$20; for admission to the Dissecting Rooms and Demonstrations, \$10; Matriculation fee (paid but once), \$5.

NEW HAMPSHIRE.

NEW HAMPSHIRE MEDICAL INSTITUTION, HANOVER.

D. Crosby, M.D., Surgery and Obstetrics.
 E. E. Phelps, M.D., Theory and Practice.
 Albert Smith, M.D., Materia Medica and Therapeutics.
 Isaac P. Redfield, LL.D., Medical Jurisprudence.
 O. P. Hubbard, M.D., Chemistry and Pharmacy.
 E. R. Peaslee, M.D., Anatomy and Physiology.

The sixty-fourth Annual Course of Lectures will commence on the first Thursday in August, and continue fourteen weeks.

GRADUATION.—Every candidate for the degree of Doctor of Medicine shall give satisfactory evidence of good moral character, and (unless a College Graduate) of a competent knowledge of the Latin language. He shall have attended two full courses of lectures on all the branches of Medical Science, at some regularly authorized Medical School—one of which courses shall have been at this Institution. He shall give satisfactory evidence that he has devoted three full years to his professional studies, under the direction of some regular practitioner—the time spent at lectures being included. He shall prepare and present to the Faculty, at least ten days before the examination, a dissertation on some medical subject, which he may be called upon to read and defend at his examination, as the Faculty may direct. No person will be admitted to examination for a degree who intends to engage in any other than the regular practice. There are three examinations, viz.:—On the Tuesday preceding the second Wednesday in May; on the Tuesday preceding the annual commencement of the College, and at the close of the autumn course of lectures.

FEES PAYABLE IN ADVANCE.—For the Course, \$50; Matriculation (paid but once,) \$5; Graduating expenses, \$18. No notes will be received in payment of lecture fees, unless the sureties are personally known to some member of the Faculty.

Students who have attended two courses, one of them at this Institution, may attend a third gratuitously; of those who have attended two courses in any other regular Institution, one third of the usual Lecture Fee will be required.

NEW YORK.

COLLEGE OF PHYSICIANS AND SURGEONS.

Edward Delafield, M.D., President, and Prof. Emeritus.
 Alexander H. Stevens, M.D., LL.D., Prof. Emeritus.
 John Torrey, M.D., LL.D., Prof. Emeritus.
 Joseph Mather Smith, M.D., Materia Medica and Clin. Med.
 Robert Watts, M.D., Anatomy.
 Willard Parker, M.D., Surgery.
 Chandler R. Gilman, M.D., Obstetrics and Med. Jurisprud.
 Alonzo Clark, M.D., Pathology and Practical Medicine.
 John C. Dalton, Jr., M.D., Physiology and Microscopic Anat.
 Samuel St. John, M.D., Chemistry.
 Thos. M. Markoe, M.D., Lecturer Adjunct Surgery.
 George T. Elliot, M.D., Lecturer Adjunct Obstetrics.
 Henry B. Sands, M.D., Demonstrator.

The annual course of lectures will commence October 22d, and continue until the middle of March ensuing.

FACULTY PRIZES.—Two Prizes are annually awarded by the Faculty, at the College Commencement in March, for the best two Graduating Theses presented during the year, viz.:—A First Prize of Fifty Dollars, and a Second Prize of Twenty-five Dollars. The Graduating Theses, competing for these prizes, should be handed in to the Secretary of the Faculty in the Fall, by the 1st of September; and in the Spring, by the 1st of February.

HARSEN PRIZES.—Founded by Jacob Harsen, M.D., an Alumnus of the College.—Three Annual Prizes will be awarded for the best three written Reports of the Clinical Instruction in the New York Hospital, during any four months of the year immediately preceding the Annual Commencement in March, which shall be prepared and

presented by students of the College of Physicians and Surgeons, viz.:—A First Prize, consisting of a Gold Medal, worth Fifty Dollars, and One Hundred Dollars in money. A Second Prize, consisting of a Silver Medal, and Fifty Dollars in money; and a Third Prize, consisting of a Bronze Medal, and Twenty-five Dollars in money. All the medals to be struck from the same die. The reports competing for these prizes should be handed in to Professor Clark on or before the 20th day of February in each year.

GRADUATION.—There are two periods for conferring degrees: one at the *Annual Commencement*, in March; the other at the opening of the Regular Course, in October. Candidates for the degree of Doctor of Medicine, must have attended two full courses of Lectures,—the *latter* in this College. They must also have studied medicine three years, under the direction of a regular physician, including the attendance upon lectures; and have attained the age of twenty-one years. Each candidate is required to write a thesis, on some subject connected with the science of medicine, and to deposit it with the Secretary of the Faculty. Full and formal certificates of the time of study, of moral character, and of age, must also be furnished. The examination of candidates takes place semi-annually; that for graduation in the Spring, early in March; that for graduation in the Fall, on the second Tuesday in September. Students who have attended two full courses in this College, or who, having attended one full course in some regularly established medical school, shall *subsequently* attend one full course in this College, are admitted to a third course of lectures on paying the matriculation fee only.

GRADUATES of this school are admitted without fee. GRADUATES of other schools, who have been in practice three years, and *Theological Students*, are admitted on general ticket, by paying the matriculation fee.

FEES.—Matriculation Fee, \$5; Fees for the full Course of Lectures by the Professors, \$105; but students are not required to take out all the tickets during one session. Ticket of the Demonstrator of Anatomy, \$5; Graduation Fee, \$25.

UNIVERSITY OF NEW YORK, MEDICAL DEPARTMENT.

Rev. Isaac Ferris, D.D., LL.D., Chancellor.
 Valentine Mott, M.D., LL.D., Emeritus.
 Martin Paine, M.D., LL.D., Materia Med. and Therapeutics.
 Gunning S. Bedford, M.D., Obstetrics.
 John W. Draper, M.D., LL.D., Chemistry and Physiology.
 Alfred C. Post, M.D., Surgery.
 William H. Van Buren, M.D., Anatomy.
 John T. Metcalf, M.D., Practice of Medicine.
 J. W. S. Gouley, M.D., Demonstrator.

The session for 1860-61 will begin on Monday, Oct. 15, and will continue until the 1st of March.

CLINICAL INSTRUCTION.—Clinical Instruction constitutes a prominent feature in the plan of education; and the unlimited resources of New York enable the faculty to carry out the object which, to the practitioner, whether in surgery, medicine, or obstetrics, is the great end of medical study—namely, *familiarity with disease at the bedside*.

1st. *An Obstetric Clinic for the Diseases of Women and Children*, on every Monday, from 2½ to 4½ o'clock, P. M., by Prof. Bedford.

2d. *Surgical Clinic* every Tuesday, from 3 to 4½ o'clock P. M., by Prof. Mott.

3d. *Medical Clinic* every Wednesday, from 2½ to 3½ o'clock P. M., by Prof. Metcalf.

4th. *Surgical Clinic, with the Diseases of the Genito-Urinary Organs*, every Wednesday, from 3½ to 4½ o'clock P. M., by Prof. Van Buren.

5th. *Surgical Clinic* every Saturday, from 11 A. M. to 1 P. M., by Prof. Post.

MUSEUMS.—The Anatomical and Surgical Museums are rich in preparations of practical value. They contain the extensive collection of Professors Mott, Bedford, Post, and Van Buren.

MOTT MEDALS.—These medals will be given to candidates for graduation, as follows:—One of gold, one of silver, one of bronze. The gold medal to the candidate who shall prepare the best dried anatomical or anatomico-surgical preparation. The silver medal to the second best of that description. The bronze medal to the candidate who shall furnish the best book of recorded cases, and remarks of the Professor or either of the surgical clinics. Candidates for graduation only shall compete for these medals. The preparations shall belong to Dr. Mott's museum, be labelled with the name of the maker, and entered on the catalogue. The volume of cases shall also belong to, and be deposited in, the museum. One of the faculty will be associated with Dr. Mott in the adjudication of the medals. The medals to be announced by the Chancellor, and presented to the successful candidates, at the Spring commencement of the College. The medals not to be awarded except the specimens presented are of sufficiently good character.

METCALFE PRIZES.—Professor Metcalfe will give two prizes for the first and second reports, in order of merit, of cases occurring at his college clinics during the session.

VAN BUREN PRIZES.—The Professor of Anatomy offers two prizes for the best dissections by members of the dissecting class, on the recent subject. Conditions and further explanation given in full during the session.

SPRING, SUMMER, AND AUTUMN COURSE OF LECTURES.—The faculty, with a view of increasing the facilities for medical education, without increasing its expense, instituted in 1882, a spring, summer, and autumn course of lectures, which will commence, the present year, on the 21st day of March, and be continued to the 15th day of October, when the usual winter lectures will be resumed. These lectures will be delivered partly by the faculty, and partly by the gentlemen already named in connexion with the faculty. Students who have attended the winter course of lectures will be admitted to the spring, summer, and autumn course, free of charge. Those who have not attended the winter course will be admitted on payment of the matriculation fee and \$25; and should they decide on becoming pupils of the University for the winter course ensuing, the \$30 thus paid, will be credited to them on taking out their tickets for that course. The student will, therefore, gain in this manner seven months' instruction, free of cost. Graduates who may have attended the optional course, will have conferred on them a certificate of honor, as an evidence of their having pursued a fuller course of medical instruction than that usually followed by students.

BENEFICIARY FOUNDATION.—For the purpose of assisting meritorious individuals, the Faculty will receive, annually, a limited number of beneficiaries, who will be required to pay \$20 each towards the expense of the Institution, and the matriculation fee. Those who are desirous of availing themselves of this foundation will present to the President of the Faculty, during the summer, satisfactory documents, showing them to be persons of good moral character, and of appropriate elementary education, and in circumstances which require this assistance.

GRADUATION.—The examination for the degree will commence towards the close of the session, and will be continued daily until the candidates shall have been examined. The following are the requisites for the diploma:—1. The candidate must be twenty-one years of age. 2. He must have attended two courses of medical lectures; one of which must have been delivered in the medical department of the University of New York. 3. The candidate must have studied medicine for three years (the terms of attending lectures being included in these), under the direction of a respectable medical practitioner. 4. He must write a medical thesis, either in the English, Latin, or French language. Two commencements take place annually in the University, at either of which candidates who have complied with the above requisitions may graduate. The first takes place early in the month of March, and the other about the end of June.

FEES.—Full course of lectures, \$105; matriculation fee,

\$5; fee for instruction by the demonstrator, \$5; graduation fee, \$30.

NEW YORK MEDICAL COLLEGE.

R. Ogden Doremus, M.D., Chemistry.
J. M. Carnochan, M.D., Clinical and Operative Surgery.
B. Meredith Reese, M.D., LL.D., Medicine and Med. Jurisp.
B. J. Raphael, M.D., Principles and Practice of Surgery.
A. K. Gardner, M.D., Clinical Midwifery and Dis. of Females.
Jno. O. Bronson, M.D., Anatomy.
Chas. A. Budd, M.D., Midwifery.
A. Jacobi, M.D., Infantile Pathology and Therapeutics.
Bern L. Budd, M.D., Toxicology.
Fowler Prentice, M.D., Demonstrator of Anatomy.

In the reorganization of this College, the Trustees have endeavored to conform to the recommendations of the American Medical Association, as follows: 1. They have increased the number of professorships and of the branches taught in the school. 2. They have provided for an increase of the number of hours devoted to practical instruction, and for a reduction of the number of didactic lectures in each day. 3. They have extended the term of their Annual Session to six months, and they design to give a Summer Course of four months by the Faculty. 4. They will require daily examinations, or recapitulation of lectures. 5. They have provided for thorough instruction in Clinical Medicine, Surgery, and Obstetrics, and will continue the College Clinics throughout the Course, in addition to the multiplied opportunities afforded by our numerous Hospitals, Infirmaries, Dispensaries, Nurseries, etc., to all of which our students will have access. 6. They have set apart one-third of the College building for a Hospital, where everything pertaining to a well-regulated institution will be furnished under the same roof. 7. They are required by their charter to conduct the final examination of all candidates for the Doctorate before an Independent Board of Examiners, appointed as Censors by the Trustees; and in addition, the State Medical Society has the privilege of being represented by the Censors, to see that the laws of the State, in regard to age and term of study, are complied with, and that no unworthy or unqualified candidate be advanced to the degree of Doctor of Medicine by this College.

CLINICAL INSTRUCTION.—The Board of Trustees announce that they have opened a part of the College building as a Hospital. There will be two Clinics weekly, for the treatment of Surgical Diseases generally, with Operations before the Class. Prof. Carnochan will hold one, and Prof. Raphael the other. Profs. Reese and Bronson will hold a weekly Clinic for the treatment of Acute and Chronic Disease, in general, with Physical Diagnosis. Profs. Gardner and Budd will also have a weekly Clinic for Diseases of Women. Prof. Jacobi will hold two Clinics in each week for Diseases of Children.

MUSEUM.—The valuable and extensive Museum, selected in Europe for this College, by its founder and late President, Professor Horace Green, will, by his courtesy, remain in possession of the Faculty, and be still available; and will be greatly increased from the private cabinets of the Professors.

PRIZES.—There are annually distributed to the successful competitors among the students of all the colleges numerous prizes which are open to diligent students, for the best thesis, for the best anatomical preparation, &c., &c. In our own school one of these prizes for the best thesis has been founded by an alumnus, and is annually awarded.

GRADUATION.—At the Annual Commencement, in March, the Degree of M.D. will be conferred, which, by law of the State, conveys every right and privilege of the profession to teach and practise Medicine. Candidates must have attended two full courses of lectures in some regular Medical College, the last of which must be in this College. They must be twenty-one years of age, and have studied medicine for at least three years, under direction of some regular physician. They must each write a thesis on some

professional subject, and deposit it with the Dean, with certificates of age, time of study, good moral character, and proof of having passed their two collegiate courses of instruction. The examination for a Degree will be by the Faculty, before the Censors appointed by the Trustees and State Medical Society.

FEES.—Full Course of Lectures, \$105; Matriculation Fee, \$5; Fee for Demonstrator, \$5; Fee for Final Examination, \$30. Two full Courses, one being in this College, will admit to a Third Course on paying Matriculation Fee. Applications for less than a full course may be arranged with the Dean. By the charter of the College, it is provided that five students of the Free Academy shall annually be admitted to the Lectures *free*; and by the action of the Trustees and Faculty, similar arrangements may be made for missionaries, clergymen's sons, and other exceptional cases, on application to the Dean.

LONG ISLAND COLLEGE HOSPITAL, BROOKLYN.

Austin Flint, M.D., Practical Medicine and Pathology.
Frank H. Hamilton, M.D., Surgery.
James D. Trask, M.D., Obstetrics.
R. Ogden Doremus, M.D., Chemistry and Toxicology.
Joseph C. Hutchison, M.D., Surg. Anat. and Operative Surg.
John C. Dalton, M.D., Physiology and Microscopic Anat.
DeWitt C. Enos, M.D., Anatomy.
Edwin N. Chapman, M.D., Materia Med. and Therapeutics.
J. G. Johnson, M.D., Demonstrator.

The course preliminary to the session of 1861, will begin on the 18th of February, and the regular lectures on the 18th of March, to continue sixteen weeks.

CLINICAL INSTRUCTION.—Ample opportunities for clinical observation and teaching are afforded in the hospitals and dispensaries with which Brooklyn is liberally provided. Brooklyn City Hospital, one of the finest and best appointed in the country, is open to medical men and students without charge.

GRADUATION.—The candidate for graduation must have studied medicine for three years under the direction of a regular practitioner, must be twenty-one years of age, of good moral character, have attended two full courses of lectures, of which one must be at this institution, and submit to the faculty a thesis in his own handwriting on some medical subject.

FEES.—Fees for the whole course, including Matriculation fee, \$100; Single tickets, (exclusive of Matriculation fee of \$5) each, \$12 50; Graduation fee, \$20; Demonstrator's ticket, \$5; Hospital tickets, gratuitous. Regular physicians will be admitted to all the lectures on payment of \$5 (the amount of the Matriculation fee).

GENEVA MEDICAL COLLEGE, GENEVA.

John Towler, M.D., Chemistry and Pharmacy.
Frederick Hyde, M.D., Surgery.
George Burr, M.D., Anatomy.
Caleb Green, M.D., Physiology and Pathology.
Hiram N. Eastman, M.D., Medicine and Materia Medica.
Joseph Beattie, M.D., Obstetrics, and Med. Jurisprudence.
Lyman W. Bliss, M.D., Demonstrator.

The next session of Geneva Medical College will commence on Wednesday, the 3d day of October, 1859, and will continue sixteen weeks. Through the liberality of the Legislature, and from the College and Faculty endowments, between twenty-five and thirty thousand dollars have been expended in the purchase of Museum, Library, and Apparatus, and in the erection of one of the best arranged and most commodious college buildings in the United States.

The **ANATOMICAL MUSEUM** has been carefully selected, both in this country and in Europe, and is alike rich in healthy and morbid specimens. This collection, with the abundant supply of recent anatomical material always on hand, will afford ample means for the study of both healthy and pathological anatomy.

RULES AND REGULATIONS.—Every student, previous to his attendance upon lectures, shall wait upon the Dean, in order to register his name, residence, and the name of the practitioner with whom he has pursued his medical studies, and shall pay a matriculation fee of eight dollars. He is recommended at the same time to take a general ticket, by paying \$32, which will entitle him to the ticket of each professor. Otherwise he shall obtain them within ten days after the commencement of lectures in any department from the respective professors. Pupils who have attended two full courses of medical lectures, one of which courses has been at this college, are admitted without the payment of lecture fees. Those who have attended two full courses at other medical institutions will be admitted to their first course at this college for one-third of the lecture fee in addition to the matriculation fee.

GRADUATION.—The candidate for the medical degree must be twenty-one years of age, of good moral character, have attended two full courses of medical lectures, the last at this institution, and must exhibit satisfactory evidence of having prosecuted the study of medicine for three years under the direction of some respectable physician. He must also undergo an examination by the professors, in their respective branches, in the presence of the Board of Curators, and present—and defend when required—a dissertation on some medical subject, composed and written by himself.

FEES, PAYABLE IN ADVANCE.—Matriculation, payable once only, \$8; Tickets for the whole Course, \$32; Graduation, \$20; Demonstrator's Ticket, \$3; Anatomical material, \$5.

ALBANY MEDICAL COLLEGE, ALBANY.

Alden March, M.D., Surgery.
James McNaughton, M.D.,
James H. Armsby, M.D., Anatomy.
Howard Townsend, M.D., Materia Medica and Physiology.
Charles H. Porter, M.D., Chemistry and Med. Jurisprud.
John V. P. Quackenbush, M.D., Prof. of Obstetrics.

The next annual course of lectures will commence on the first Tuesday in September, and continue sixteen weeks.

LIBRARY.—Number of volumes 5,000; no fee charged to students.

CLINICAL INSTRUCTION.—Saturdays of every week are devoted to clinical instruction. Students are admitted free of charge to the hospital.

GRADUATION.—The candidate must be twenty-one years of age, and exhibit certificates from a physician or surgeon duly authorized by law to practise his profession, that he has studied medicine and surgery under his instruction during a term of three years; he must have attended two full courses of lectures, the last at this institution; he must deliver to the Registrar, six weeks before the end of the term, a thesis written by himself, on some medical subject, and be prepared to defend it at his examination; he must pass a satisfactory examination on the several branches of medicine and surgery.

FEES.—Matriculation ticket, \$5; full course, \$65; perpetual ticket, \$100.

UNIVERSITY OF BUFFALO—MEDICAL DEPARTMENT—BUFFALO.

Charles B. Coventry, M.D., Emeritus.
James P. White, M.D., Obstetrics.
Edward M. Moore, M.D., Surgery and Clinical Surgery.
George Hadley, M.D., Chemistry and Pharmacy.
Thomas F. Rochester, M.D., Medicine and Clinical Medicine.
Sandford Eastman, M.D., Anatomy.
Joshua R. Lothrop, M.D., Materia Medica.
Aaron J. Steele, M.D., Demonstrator.

The regular term will commence on the first Wednesday in November, and continue sixteen weeks. From the second Wednesday in October to the commencement of the regular term, the College will be opened to those who

wish to pursue practical anatomy in advance of the lecture session.

GRADUATION.—The degree of Doctor in Medicine is conferred by the Chancellor, in accordance with a vote of the Council of the University, upon the joint recommendation of the Faculty and Curators. The following are the requisites for graduation: Twenty-one years of age; a good moral character; satisfactory evidence of having studied medicine for three years, under the tuition of a respectable and regular practitioner or practitioners; dissection during one course, either at this or some other incorporated Institution; two full courses of lectures, the last having been at this Institution. The candidate must deliver to the Registrar, three weeks before the close of the term, a thesis, composed and written by himself, on some medical subject, which has been examined and approved by the Faculty. He must have passed an examination in the several departments of medical education, which shall have been satisfactory to the Faculty and Curators of the University.

FEES AND REGULATIONS.—*Students must matriculate when they commence their attendance at the lectures.* Matriculation fees (annually), \$5. The fees of all the professors, inclusive of the hospital ticket, amount to \$70. This sum is to be paid into the hands of the Dean, who issues the tickets of the several professors. The Dean issues a perpetual ticket, on payment of \$100. He may, also, at his discretion, receive well-secured notes for this amount, which will be due in not more than one year from date, with interest.

Students who have attended a full course of lectures in this or any other Institution, will be received on payment of \$50. The fee from those who have attended two courses elsewhere is \$25. The alumni of this College, and all who have attended two full courses at the Institution, are entitled to all the tickets, on payment of a matriculation fee of \$5. Graduates of any respectable college, after three years, will receive all the tickets, on payment of the matriculation fee.

OHIO.

MEDICAL COLLEGE OF OHIO, CINCINNATI.

M. B. Wright, M.D., Obs. and Dis. of Women and Children.
George C. Blackman, M.D., Surgery and Clinical Surgery.
James Graham, M.D., Practice of Medicine.
W. W. Dawson, M.D., Anatomy.
J. F. Hibberd, M.D., Physiology and Pathology.
J. C. Reeves, M.D., Materia Medica and Therapeutics.
Charles O'Leary, M.D., Chemistry and Toxicology.
John S. Billings, M.D., Demonstrator.
Charles Thornton, M.D., Professor to Professor of Surgery.

The next course of lectures will commence on October 22d, and continue until the 1st of March.

CLINICAL INSTRUCTION.—The Faculty are determined to devote time and attention to Clinical instruction. The patients of the Commercial Hospital and City Dispensary will be examined, prescribed for, or operated upon daily, in presence of the class. Opportunity for witnessing cases and operations at St. John's Hotel for Invalids will also be presented.

FEES.—Professors' Tickets (including Hospital and Matriculation), \$105; Matriculation Ticket, \$5; Dissecting Ticket, \$6; Graduation Fee, \$25.

CLEVELAND MEDICAL COLLEGE, CLEVELAND.

John Delamater, M.D., Midwifery and Diseases of Women.
Jared P. Kirtland, M.D., Principles & Practice of Medicine.
J. Lang Cassels, M.D., Chemistry and Botany.
J. J. Delamater, M.D., Mat. Med. Therap. and Med. Jurisp.
Proctor Thayer, M.D., Anatomy and Physiology.
Gustav C. E. Weber, M.D., Principles and Practice of Sur.
H. K. Cushing, M.D., Midwifery.
C. A. Hartmann, M.D., Demonstrator.

The lecture term begins on the first Wednesday of November of each year, and continues sixteen weeks.

This institution, founded A.D. 1843, has had 2435 matriculants, 669 of whom have received the degree of M.D. The college building is a fine structure, commodious, standing at the head of St. Clair street, and provided with a large medical library, a fine cabinet of natural history, and cabinets of special and morbid anatomy.

The lectures are all fully and minutely illustrated by plates, models, specimens, and instruments, while the facilities for the study of practical anatomy, and clinical medicine are unsurpassed anywhere—the United States Marine Hospital being open to students.

FEES.—The ticket fee, including that for matriculation, is \$65.

STARLING MEDICAL COLLEGE, COLUMBUS.

S. M. Smith, M.D., Theory and Practice.
Francis Carter, M.D., Obs. and Dis. of Women and Children.
John Dawson, M.D., Anatomy and Physiology.
J. W. Hamilton, M.D., Surgery.
S. Loving, M.D., Mat. Med., Therap. and Med. Jurisp.
Theo. G. Wormley, M.D., Chemistry and Toxicology.
R. N. Barr, M.D., Demonstrator.

The next session of Starling Medical College will commence on Thursday, October 18th, 1860, and will be continued until the 1st of March. The Museum of the Institution has been made very attractive by late receipts from France and Germany.

The clinical advantages of Starling Medical College form quite an important feature, as the Faculty and all members of class have free access to the hospital wards of Franklin County Infirmary, and, *by express statute*, are permitted the use of the extensive hospital of the Ohio Penitentiary.

FEES.—Tickets, \$60; Matriculation (paid but once), \$5; Demonstrator of Anatomy, \$8; Graduation, \$20.

CINCINNATI COLLEGE OF MEDICINE AND SURGERY, CINCINNATI.

A. H. Baker, M.D., Surgery, and Clinical Surgery.
B. S. Lawson, M.D., Medicine and Clinical Medicine.
P. M. Crume, M.D., Obstetrics and Diseases of Women.
R. Spencer, M.D., Anatomy and Physiology.
T. W. Gordon, M.D., Chemistry and Pharmacy.
T. A. Reamy, M.D., Materia Medica, and Therapeutics.
I. C. Walker, M.D., Pathology and Physical Diagnosis.
C. B. Maclay, M.D., Medical Jurisprudence.
J. W. Baker, M.D., Adjunct Prof. of Medicine.
G. R. Chitwood, M.D., Adjunct Prof. of Obstetrics.
Wm. Spencer, M.D., Adjunct Prof. of Anatomy.

The lectures will commence on Monday, the 15th of October; and close the last week in February.

MATRICULATION AND GRADUATING.—1st. The student before matriculating must give satisfactory evidence of having acquired a good English education. This may be done by the certificate of his teacher, or by his own composition at the time of matriculation. 2d. The candidate must give evidence of good moral character, and must be at least twenty-one years of age. He must have attended two full courses of lectures in some respectable medical school, one of which shall have been in this college, and must exhibit his tickets, or other satisfactory evidence thereof to the president of the faculty. He must have studied medicine not less than three years, with a respectable practitioner—practised dissection and attended clinical instruction at least one session. He must present to the president of the college, at least a month before the end of the term, a thesis of *his own* composition, on some medical subject; and, at his final examination, exhibit to the faculty satisfactory evidence of his professional attainments. He must, before he receives the degree, acknowledge the right of the faculty to revoke it, should he engage in quackery, or be guilty of gross unprofessional conduct. Four years practice will be considered as equivalent to attendance on one course of lectures. The degree will not be conferred upon any candidate who absents himself from the public commencement, except by especial permission of the faculty. The commencement for conferring degrees

will take place immediately after the close of the lecture term.

FEES.—Professors' Tickets, free; matriculation, \$20; Demonstrator's Ticket, \$5; Hospital Ticket, \$5; Graduation, \$25.

PENNSYLVANIA.

UNIVERSITY OF PENNSYLVANIA—MEDICAL DEPARTMENT,
PHILADELPHIA.

William Gibson, M.D., Emeritus Surgery.
George B. Wood, M.D., Emeritus Medicine.
Samuel Jackson, M.D., Institutes of Medicine.
H. L. Hodge, M.D., Obs. and Dis. of Women and Child.
Joseph Carson, M.D., Materia Medica and Pharmacy.
Robert E. Rogers, M.D., Chemistry.
Joseph Leidy, M.D., Anatomy.
Henry H. Smith, M.D., Surgery.
William Pepper, M.D., Theory and Practice of Medicine.
William Hunt, M.D., Demonstrator.

The regular lectures for the sessions of 1860–61 will commence on Monday, October 8, and continue until the 1st of March ensuing.

GRADUATION.—Candidates are required to have attained the age of twenty-one; to be of good moral character; to have applied themselves to the study of medicine for three years, and been during that time the private pupil, for two years at least, of a respectable practitioner of medicine; to have attended two complete courses of the following lectures, one of which must be in this institution: theory and practice of medicine; anatomy; materia medica and pharmacy; chemistry; surgery; obstetrics, and the diseases of women and children; institutes of medicine. To have attended one course of clinical instruction in the Pennsylvania Hospital, or some other institution approved of by the faculty of medicine; to give evidence to the Dean that the above rules have been complied with; to deliver to the Dean a thesis, composed by himself, on some medical subject, which is referred to one of the professors, who shall examine the candidate upon it, and report to the medical faculty. When a candidate is rejected his essay will be retained by the faculty. The essay must be in the candidate's own handwriting, and must be written uniformly on letter-paper of the same size, the alternate pages being left blank. Bad spelling in a thesis, or evidences of want of a literary culture, will preclude a candidate from examination for a degree. A thesis may be published by a candidate if he desire it, with the permission of the professor by whom he was examined thereon; but no alteration shall be made in such thesis without the consent of said professor. Candidates who have not been successful upon a first examination, will be permitted to have a second, when all the classes have been disposed of. This examination will be conducted at a full meeting of the professors. Candidates shall pay the fees of graduation at the time of examination. The degree will not be conferred upon a candidate who absents himself from the public commencement, except by special permission of the medical faculty.

FEES.—Fees for the course of lectures, \$105; Matriculating fee (paid once only), \$5; Graduating fee, \$30.

JEFFERSON MEDICAL COLLEGE.

Robley Dunglison, M.D., Institutes of Medicine, etc.
Joseph Pancoast, M.D., General, Descriptive and Sur. Anat.
Charles D. Meigs, M.D., Obs. and Dis. of Wo. and Children.
Franklin Bache, M.D., Chemistry.
Samuel D. Gross, M.D., Institutes and Practice of Surgery.
Thomas D. Mitchell, M.D., Mat. Med. and General Therap.
Samuel H. Dickson, M.D., Practice of Medicine.
Ellerslie Wallace, M.D., Demonstrator.

The regular course of lectures for the session of 1860–61, will commence October 8, and continue until March the 1st ensuing.

GRADUATION.—Candidates are required to be of good

moral character, and at least twenty-one years of age; to have attended two full courses of lectures in some respectable medical school, one of which shall have been in this college, and must exhibit their tickets, or other adequate evidence thereof, to the Dean of the Faculty; to have studied medicine for not less than three years, and have attended at least one course of clinical instruction in an institution approved by the faculty; to present to the Dean of the Faculty a thesis, of his own composition, correctly written, and in his own handwriting, on some medical subject; and exhibit to the faculty, at his examination, satisfactory evidence of his professional attainments. If, after examination for a degree, the candidate, on ballot, shall be found to have received three negative votes, he shall be entitled to a fresh examination. Should he decline this, he may withdraw his thesis, and not be considered as rejected. The degree will not be conferred upon any candidate who absents himself from the public commencement, except by special permission of the faculty.

FEES.—Fees for the course of lectures, \$105; Matriculating fee (paid once only), \$5; Graduating fee, \$30.

PENNSYLVANIA COLLEGE—MEDICAL DEPARTMENT, PHILADELPHIA.

B. Howard Rand, M.D., Chemistry.
Henry Hartshorne, M.D., Practice of Medicine.
Lewis D. Harlow, M.D., Obstetrics, etc.
William S. Halasey, M.D., Surgery.
Wm. Hembel Taggart, M.D., Materia Medica.
James Aitken Meigs, M.D., Institutes of Medicine.
Wm. H. Gobrecht, M.D., Anatomy.
Theodore A. Demm , M.D., Demonstrator.

The session of 1860–61 will commence on Monday, 8th of October, and continue, without intermission, until the first of March. The Commencement for conferring Degrees will take place early in March.

CLINICAL INSTRUCTION.—The students of this College will have access to the courses of the Pennsylvania and Philadelphia Hospitals. A *Clinic* is held at the College every Wednesday and Saturday, to which a large number of patients resort to be prescribed for and operated upon in the presence of the class. An *Obstetrical Clinic* is also in operation, under the care of the Professor of Obstetrics, at which students will be made practically acquainted with the diseases peculiar to women, the use of the speculum, etc.

BENEFICIARIES.—The Faculty have established a *beneficiary* foundation upon which they will receive a limited number of such students annually. The number is at present limited to ten. All applications for this purpose must be made to the Dean, accompanied by an ingenuous statement of the claims of the candidates, and by letters of recommendation from respectable parties, and must be sent in as early as possible.

GRADUATION.—1. The candidate must have attained the age of twenty-one years, must be of good moral character, and have applied himself to the study of medicine for three years (courses of lectures included), and have been, during that time, the pupil of a respectable practitioner of medicine, for at least two years. 2. He must have attended two complete courses of lectures on all the branches, one of which must have been in the Medical Department of Pennsylvania College, and the other, if not in this institution, in some Medical School recognised by it. 3. He must also have attended one course of Practical Anatomy, and at least one course of Clinical Instruction, in some institution approved by the Faculty. 4. When a candidate applies to the Dean for admission to examination, he must submit a thesis on some medical subject, selected by himself, and written correctly in his own hand, on thesis paper, in English, Spanish, French, German or Latin. 5. The candidate shall pay the fees of graduation at the time of his examination, or before receiving notice of his success; and if unsuccessful, the fees will be returned to him by the Dean, but his thesis will be retained. 6. The decree will

not be conferred upon a candidate who absents himself from the public Commencement, except by special permission of the Faculty. 7. Premature examinations will not be granted except under circumstances of extraordinary urgency and imperativeness, and only to unusually advanced students.

FEES.—Matriculation Fee (paid once only), \$5; Graduation Fee, \$30; Fee for each ticket, \$15; Dissecting ticket, \$10.

SOUTH CAROLINA.

MEDICAL COLLEGE OF THE STATE OF SOUTH CAROLINA, AT CHARLESTON.

J. E. Holbrook, M.D., Anatomy.
James Moultrie, M.D., Physiology.
J. J. Chisolm, M.D., Surgery.
E. Geddings, M.D., Institutes and Practice.
Henry R. Frost, M.D., Materia Medica.
Thomas G. Prioleau, M.D., Obstetrics.
C. U. Shepard, M.D., Chemistry.
Francis T. Miles, M.D., Demonstrator.
Samuel Logan, M.D., Assistant Demonstrator.

The annual course of lectures commence on the 1st of November.

CLINICAL INSTRUCTION.—At the Roper Hospital, Clinical Lectures are delivered twice a week, by the Physician and Surgeon of the Institution, and operations performed before the Class in the Amphitheatre of the Hospital. The Faculty Ward in the Roper Hospital, with the conveniences which have been furnished, is a valuable addition to the surgical practice of the city. Operations are performed before the class, and students have opportunities of being made familiar with the subsequent treatment.

To the Anatomical Museum valuable additions have been made in models of a very large size, illustrative of the more minute and delicate structures of the human body. A valuable and interesting collection in wax, of the various parts of the system, in a healthy and diseased state, has also been added.

FEES.—Full course, \$105; Graduation, \$30.

TENNESSEE.

UNIVERSITY OF NASHVILLE—MEDICAL DEPARTMENT—NASHVILLE.

Thomas R. Jennings, M.D., Professor of Anatomy.
J. Berrien Lindsley, M.D., Prof. of Chemistry and Pharm.
C. K. Winston, M.D., Prof. Materia Medica and Med. Jur.
A. H. Buchanan, M.D., Prof. Surg. Anat. and Physiology.
John M. Watson, M.D., Obs. and Dis. of Women and Chil.
Paul F. Eve, M.D., Prof. of Principles and Practice of Surg.
W. K. Bowling, M.D., Prof. of Institutes and Prac. of Med.
Wm. T. Briggs, M.D., Adjunct Prof. and Dem. of Anat.

The Tenth Annual Course of Lectures in this Institution will commence on Monday, the 5th of Nov. next, and continue till the first of the ensuing March. A *Preliminary Course* of Lectures, free to all Students, will be given by the Professors, commencing also on the first Monday in October.

CLINICAL INSTRUCTION.—Tennessee State Hospital under the direction of the Faculty is open to the Class free of charge. A Clinique has been established in connexion with the University, at which operations are performed and cases prescribed for and lectured upon in the presence of the class.

FEES.—Amount of Fees for Lectures is \$105; Matriculation fee (paid once only), \$5; Practical Anatomy, \$10; Graduation Fee, \$25.

MEMPHIS MEDICAL COLLEGE, MEMPHIS.*

John Millington, M.D., Chemistry.
Wm. J. Tuck, M.D., Physiology and Pathology.
Howell R. Robards, M.D., Surgery.

A. K. Taylor, M.D., Anatomy.
C. B. Guthrie, M.D., Materia Medica.
Lewis Shanks, M.D., Obs. and Dis. of Women.
John Pitman, M.D., Medicine.
S. C. Pointer, M.D., Demonstrator.

Regular lectures commence on the 1st of November, and continue sixteen weeks.

Clinical instruction is given twice a week at the Memphis Hospital.

FEES.—Full course, \$105; Matriculation, \$5; Practical Anatomy, \$10; Graduation, \$25.

SHELBY MEDICAL COLLEGE, NASHVILLE.

Thomas L. Maddin, M.D., Principles and Practice of Surg.
Daniel F. Wright, M.D., Physiology and Pathology.
John H. Callender, M.D., Materia Medica and Therapeutics.
Henri Erni, M.D., Med. Chemistry and Med. Jurisprudence.
J. J. Abernathy, M.D., Theory and Practice of Medicine.
John P. Ford, M.D., Obs. and Dis. of Women.
Daniel B. Cliffe, M.D., Descriptive and Surgical Anatomy.
H. M. Compton, M.D., Demonstrator.

The next session of the Shelby Medical College will commence on the First Monday, being the First of October, and will close on or near the first of the ensuing March.

MUSEUM.—The MUSEUM is one of the most select collections in the country.

CLINICAL INSTRUCTION.—The Faculty state that Clinical instruction will, from beginning to end, form the basis of their whole system of instruction; and that with this view they have succeeded in establishing a HOSPITAL, of moderate dimensions, but most complete in its arrangements, upon the same premises, and connected with the College buildings. The wards of this Institution accommodate all the indigent sick of the city, together with the United States marine patients, constituting a number and class of patients which will entirely subserve the objects of clinical teaching.

GRADUATION.—1. The candidate must have attained the age of twenty-one years, and have applied himself to the study of medicine for three years, under the supervision of a reputable practitioner of medicine. 2. He must have attended two complete regular courses of lectures in a reputable school of medicine, the latter one being in this College, and one course in Practical Anatomy. Four years of reputable practice, with satisfactory evidences of the fact, will be received as a substitute for one course. 3. The candidate for admission to a degree must exhibit to the Dean his tickets, as proof that the regulations above have been complied with; and at the same time deliver to the Dean a thesis of his own composition on some medical subject. 4. Graduates of other respectable medical schools are admitted to the lectures on payment of the matriculation fee. 5. An affirmative answer in writing will be required to the following question: Is it your present intention to practice regular medicine, and to abjure all forms of empiricism, and all systems of practice based upon a sectarian organization, or an exclusive dogma; and to conform to the code of ethics of the American Medical Association?

FEES.—Amount of fees for Lectures, \$105; Matriculation fee (paid but once), \$5; Demonstrator's fee, \$10; Graduation fee, \$25.

VERMONT.

CASTLETON MEDICAL COLLEGE, CASTLETON.

Wm. P. Seymour, M.D., Materia Medica and Therapeutics.
Wm. Sweetser, M.D., Practice of Medicine.
E. K. Sanborn, M.D., Surgery.
P. Pineo, M.D., Medical Jurisprudence.
Corydon La Ford, M.D., Anatomy.
P. D. Bradford, M.D., Physiology and Pathology.
George Hadley, M.D., Chemistry and Natural History.
Adrian T. Woodward, M.D., Obstetrics.

There will be delivered at this institute one course of Medical Lectures annually, commencing on the last Thursday in February of each year, and continuing sixteen weeks.

FEES.—For lectures, \$50; for those who have attended two courses at other colleges, \$10; Matriculation, \$5; Graduation, \$16.

UNIVERSITY OF VERMONT.—MEDICAL COLLEGE, BURLINGTON.

S. W. Thayer, Jr., M.D., Anatomy.
W. Carpenter, M.D., Materia Medica.
J. Perkins, M.D., Obstetrics and Diseases of Women.
D. S. Conant, M.D., Surgery.
R. C. Stiles, M.D., Physiology and Pathology.
Henry M. Seely, M.D., Chemistry and Pharmacy.

The next annual course of lectures will commence the last Thursday, being the twenty-third of February, and will be continued until Wednesday, June sixth.

BENEFICIARIES.—In consideration of the liberal donations made to the Medical College by the citizens of Burlington, the Faculty of Medicine have established a Beneficiary. A limited number of students will be admitted to all the Lectures and enjoy all the privileges upon the payment of from \$15 to \$25, according to the number of applicants. The sons of Physicians preferred. Those wishing to avail themselves of the privileges of this benefit are requested to confer with the Dean as early as possible.

GRADUATION.—There are two periods for conferring degrees; one, at the close of the annual course of Lectures in June, the other at the close of the annual term of private instruction in Burlington. Candidates must have attended two full courses of Lectures, one in this Institution—must have studied medicine three years with a regular physician, and have attained the age of twenty-one years. Each candidate is required to write a thesis upon some subject connected with the Science of Medicine, and deposit it with the Dean. Full and formal certificates of age, term of study, and of moral character must be furnished.

CLINICAL INSTRUCTION.—On Saturday of each week a Medical and Surgical Clinique will be held at the Medical College.

FEES.—Matriculation, \$3; Dean's Certificate (entitling the holder to the Tickets of each Professor), \$50; Graduation, \$18. Students who have attended two full courses in other regular Medical Institutions, will be admitted upon payment of the Matriculation fee, and a fee of \$10. Graduates of this and other regular Medical Schools are invited to attend the lectures free of charge.

VIRGINIA.

MEDICAL COLLEGE OF VIRGINIA, RICHMOND.

Charles Bell Gibson, M.D., Surgery and Surgical Anatomy.
David H. Tucker, M.D., Theory and Practice of Medicine.
Beverly R. Wellford, M.D., Materia Med. and Therapeutics.
A. E. Peticolas, M.D., General and Special Anatomy.
Levin S. Joynes, M.D., Medicine and Med. Jurisprudence.
James H. Conway, M.D., Obst. and Diseases of Women.
James B. McCaw, M.D., Chemistry and Pharmacy.
Marion Howard, M.D., Demonstrator.

The next annual course of lectures in the Medical College of Virginia will commence on the first Monday in October, 1860, and continue until the first of March following, embracing a term of five months. The examination of candidates for graduation will take place immediately after the close of the lectures, and the commencement for conferring degrees will be held about the end of the first week in March.

The recent appropriation of thirty thousand dollars to this Institution by the Legislature of Virginia, will enable the faculty to enlarge the facilities for instruction in a most important degree. The illustrations in every department will be multiplied and improved, and a commodious Hospital is now in course of erection in immediate proximity to the

College, which will greatly extend the field for clinical study. This building will contain an amphitheatre, in which clinical lectures will be delivered twice a week throughout the session, by the Professors of surgery, and practice of medicine. Students will also enjoy the clinical facilities afforded by the Richmond Alms-House.

PRIZES.—The "Warren Prize" of one hundred dollars, which has been awarded at the last two sessions, for the best essay presented by any member of the graduating class, will at the next session be divided into *two prizes of fifty dollars each*. One of them will be awarded for the best essay on any subject in *surgery* (to be selected by the writer), the other for the best essay on any subject pertaining to the *theory or practice of medicine*. The prizes will be conferred either in money, or in books, or surgical instruments of corresponding value, at the option of the successful competitors. The competition will be open to all candidates for graduation, except such as may already have received the degree at other schools. No essay will be admitted to competition which does not fill at least thirty pages of thesis paper, or twenty pages of letter paper of full size. The essays must be placed in the hands of the Dean on or before the first day of February.

GRADUATION.—1. The candidate for the degree of Doctor of Medicine must either have been the private pupil of a respectable practitioner of medicine, for at least one year, or he must have attended a course of medical instruction, given by an association of lecturers in this college, or elsewhere, between the 1st of April and the 1st of October. 2. He must have attended two full courses of lectures upon all the subjects taught in this school. 3. Students who have attended a full course of lectures in any school of medicine on the *ad eundem* of this school (including the University of Virginia, the Winchester Medical College, and other reputable schools having not less than six Professors, and in which attendance on two full courses is required of candidates for degrees), are permitted to become candidates by attending one full course, and are admitted to the same privileges with students who have attended one full course in this Institution. 4. The candidate must have given his attention to practical anatomy, under the direction of a competent demonstrator, and must have attended the clinical instruction given in the Institution. 5. He must deliver to the Dean of the faculty, on or before the first day of February, a thesis on some medical subject composed by himself and written in his own handwriting. He must, at the same time, exhibit his tickets or other satisfactory evidence that he has complied with the foregoing rules. 6. He must undergo an examination before the Faculty upon his thesis and all the subjects taught in the Institution, and if the examination prove satisfactory, he will be entitled to the degree of Doctor of Medicine. 7. General bad spelling in a thesis, and inattention to grammatical rules, will preclude a candidate from an examination. 8. Before the candidate presents himself for examination, he must deposit with the Dean the graduation fee (\$25), which will be returned to him, if not successful. 9. A student may cease to be a candidate and withdraw his thesis; but the thesis of a rejected candidate will be retained. 10. Candidates will be admitted to examination in the order in which they matriculate. 11. The commencement for conferring degrees will be held as soon after the close of the examination as practicable. 12. The degree will not be conferred upon a candidate who absents himself from the commencement, without permission of the faculty. 13. A student, entitled to become a candidate at the close of any session, may be examined for graduation in the following fall, and if successful, he will be entitled to his degree at the succeeding commencement. 14. Students who have complied with the 2d and 3d regulations, may attend subsequent courses of lectures in this Institution, without charge for the professors' tickets. 15. All graduates of this school are entitled to attend subsequent courses of lectures free of charge. 16. Students who have attended a full course of lectures in this Institution have the privilege of becoming

candidates for the situation of resident students in the college infirmary, and in the city alms-house.

FEES.—Matriculation, \$5; Professors' tickets (each), \$15; Demonstrator of Anatomy, \$10; Graduation, \$25. All tickets to be paid in advance. No charge made for clinical instruction, or for attendance at the infirmary of the college, or the Richmond alms-house, at any period of the year.

UNIVERSITY OF VIRGINIA MEDICAL SCHOOL.

Henry Howard, M.D., Medicine.

Jas. L. Cabell, M.D., Comparative Anat. Physiol. and Surg.

S. Maupin, M.D., Chemistry and Pharmacy.

J. S. Davis, M.D., Anat., Mat. Med., Therap., and Botany.

B. W. Allen, M.D., Demonstrator.

The session commences on the 1st of October, and continues without interruption until the 4th of July.

MATRICULATION.—To be admitted into the University, the student must be sixteen years of age; but the Faculty are authorized to dispense with this requisition in the case of application for admission by two brothers, one of whom is under the age of sixteen. If the applicant for admission has been a student at any other incorporated seminary, he cannot be received but on producing a certificate from such seminary, or other evidence satisfactory to the Faculty, testifying to his general good conduct. Every student is free to attend the schools of his choice, and no other than he chooses; with the condition that he shall attend at least three professors, unless he has the written authority of his parent or guardian, or the Faculty shall, for good cause shown, allow him to attend less than three. Should he be twenty-one years of age, or more, he is exempt from this condition.

EXAMINATIONS.—These are of three kinds: first, the daily examinations, which precede the lectures; second, the public examinations, two in number, held, the one about the middle of the session, the other at its close; and third, the examination for graduation, held towards the end of the session.

I. DAILY EXAMINATIONS.—In the daily examinations the student is questioned, both upon the subject of the preceding lecture and such portions of the text-book as may have been designated by the professor.

II. PUBLIC EXAMINATIONS.—The two public examinations, embracing respectively all the subjects treated of in the first half, and all those treated of in the second half of the session are thus conducted: The professor of the school prepares, in writing, a series of questions to be proposed to the class, and affixes to them numerical values, according to his estimate of their relative difficulty. On the assembling of the class for examination, these questions are for the first time presented to them; and they are required to answer, in writing, in a prescribed time, without communication with one another or with other persons, and without any reference to books. Their answers are subsequently carefully examined, and a value attached to each, not exceeding that of the corresponding question. The students are then arranged into four divisions, according to the merit of their examination, as determined by the following method: The numerical values attached to all the questions are added together, and also the values of the answers given by each student. If the last number amounts to three-fourths of the first, the student is ranked in the first division; if it be less than three-fourths, and as much as one-half, in the second; if less than a fourth, in the fourth division. The examinations are conducted and the results ascertained by a committee, consisting of the professor of the school and two other professors. The standing of the student at these examinations is communicated to his parent or guardian in the last circular of the session. Those who attain the first division receive, at the close of the session, a printed certificate of their distinction at one or both of the examinations, as the case may be, and their names are announced in the proceedings which terminate the course. These public examinations are sufficiently

comprehensive and difficult to render it impossible for the student, without steady diligence, to secure a place in the first division.

III. EXAMINATIONS FOR GRADUATION.—These are partly oral and partly in writing, and are conducted by the professor of the school, in the presence of two other professors, forming with him the committee of examination of the school. Here the student is subjected to searching interrogations upon the details and niceties, as well as the leading principles of the subject, and he is expected to be accurately versed in all the topics treated of in the lectures and the correlative texts.

As a due acquaintance with our own language is made indispensable to the attainment of even the inferior honors of the University, all candidates for degrees are subjected to an examination, in order to test their qualifications in this respect.

GRADUATION.—To merit the degree of Doctor of Medicine, the student must prove by his examination that he has made satisfactory attainments in Anatomy, Surgery, Human and Comparative Physiology, Principles and Practice of Medicine, Obstetrics, Materia Medica, Chemistry, Pharmacy, and Medical Jurisprudence.

Honorary degrees are forbidden by the laws of the University.

LIBRARY.—The library of the University, originally selected and arranged by Mr. Jefferson, has since been augmented by several valuable donations; among them the legacy of Mr. Madison, that of the late Christian Bohn, Esq., a generous and enlightened citizen of Richmond, and a donation presented by an unknown lady through the Rev. Dr. Alexander, of Princeton. Through such additions, and the annual increase by purchase, the library now numbers upwards of 30,000 volumes.

FEES.—Medical students are charged \$105 for a full course, viz.: \$25 for each of four tickets, and a fee of \$5 for dissecting material.

Medical News.

SPECIAL NOTICES.

LECTURES ON TUBERCULAR DISEASE OF THE SPINE.—*Dr. M. Gonzalez Echeverria, recently Resident Assistant in the London Hospital for Paralytics and Epileptics, is at present in New York, with the intention of devoting himself to Morbid and Normal Microscopic Anatomy. Dr. Echeverria was the private pupil of ROBIN, in Paris, from whom, as well as from Dr. BROWN SEQUARD, he brings the warmest recommendations. He will give a Course of Lectures on Tubercular Diseases of the Bones, at the College of Physicians and Surgeons, on Tuesday, Wednesday, Friday, and Saturday of the coming week (16th, 17th, 19th and 20th), at 10 o'clock, A. M. The Profession are invited to attend.*

COLLEGE OF PHYSICIANS AND SURGEONS.—*The Introductory Lecture will be delivered by Prof. JOHN C. DALTON, on Monday, October 22, at half-past Seven o'clock, P. M.*

UNIVERSITY MEDICAL COLLEGE.—*Professor VALENTINE MOTT will deliver the Introductory Lecture to the ensuing Winter Course, at the College, 107 East Fourteenth street, on Monday, October 15, at half-past Seven o'clock, P. M. The Profession and Public are respectfully invited to attend.*

NEW YORK MEDICAL COLLEGE.—*The Annual Course of Lectures commence on Wednesday, October 17th, with an Introductory Address, by Prof. DOREMUS, at Eight o'clock, P. M. The Medical Profession and Public are invited to be present.*

A large amount of matter prepared for this Number will appear in the next.

MEDICAL STUDENT'S DAILY AND HOURLY GUIDE TO THE COLLEGES AND HOSPITALS OF NEW YORK AND PHILADELPHIA—SESSION OF 1880-81.

NEW YORK.

COLLEGE OF PHYSICIANS AND SURGEONS (COR. 23d STREET AND 4th AVENUE).

Hours.	Monday.	Tuesday.	Wed.	Thursday.	Friday.	Saturday.
9 A.M.	.....	Smith	Smith	Smith	Smith	St. John
10 "	Dalton	Dalton	Dalton	Gilman	Gilman	Gilman
11 "	Parker & Markoe (Surg. Cl.)	Watts	Watts	Watts	Watts	Watts
12 M.	.....	Markoe	Parker	Clark (Med. Cl.)	Markoe	Parker
2 1/4 P.M.	.....	.....	Detmold (Surg. Cl.)	Swift (Clin. for Females)	.....	.....
4 "	Clark	Clark	Clark	Dalton	Clark	.....
5 "	Gilman	St. John	St. John	St. John	St. John	.....

UNIVERSITY MEDICAL COLLEGE (107 EAST 14th STREET, N. Y.).

Hours.	Monday.	Tuesday.	Wed.	Thursday.	Friday.	Saturday.
9 A.M.	.....	.....	.....	Metcalfe	.....	.....
10 "	Metcalfe	Metcalfe	Draper	Draper	Metcalfe	.....
11 "	Draper	Draper	Bedford	Bedford	Bedford	Post (Surg. Cl.)
12 M.	Post	Post	Mott	Post	Post	.....
2 1/4 P.M.	Bedford (Oba. Clin.)	Mott (Surg. Cl.)	Metcalfe (Med. Cl.)	Mott	Mott	.....
3 1/4 "	.....	Van Buren	Van Buren	Van Buren	Van Buren	.....
4 1/4 "	Van Buren	Paine	Paine	Paine	Paine	.....

NEW YORK MEDICAL COLLEGE (EAST 18th STREET, NEAR 4th AVENUE).

Hours.	Monday.	Tuesday.	Wed.	Thursday.	Friday.	Saturday.
9 A.M.	Clinics	Clinics	Shnetter	Clinics	Shnetter	Clinics
10 "	Jacobi	C.A. Budd	Browne	Jacobi	C.A. Budd	Browne
11 "	Raphael (Surg. Cl.)	Bronson	Gardner & Bronson	C.A. Budd (Fem. Cl.)	Bronson	Med. Clin.
12 M.	Reese	Carnochan	Carnochan	Carnochan (Surg. Cl.)	Reese	.....
3 P.M.	Gardner	Jacobi (Chil's Cl.)	B. Budd	Gardner	Jacobi (Chil's Cl.)	Carnochan (Cl. Ward's I'd Hosp.)
4 "	Doremus	Raphael	B. Budd	Raphael	Doremus	.....
5 "	Thurber	.....	Thurber	.....	Thurber	.....

NEW YORK HOSPITAL.

CLINICAL INSTRUCTION DAILY AT HALF-PAST ONE P.M.

SURGICAL CLINIC, Monday, Tuesday, Thursday, and Friday.

MEDICAL " Wednesday and Saturday.

Physicians.—Joseph M. Smith, M.D.; Henry D. Bulkley, M.D.; John H. Griscom, M.D.; Thomas F. Cock, M.D.
Surgeons.—Gordon Buck, M.D.; John Watson, M.D.; Thaddeus M. Halsted, M.D.; T. M. Markoe, M.D.; Willard Parker, M.D.; G. A. Peters, M.D.

BELLEVUE HOSPITAL.

CLINICAL INSTRUCTION DAILY AT HALF-PAST ONE P.M.

Physicians.—A. Clark, M.D.; B. W. McCready, M.D.; I. E. Taylor, M.D.; G. T. Elliot, M.D.; B. F. Barker, M.D.; A. L. Loomis, M.D.; J. W. Green, M.D.; T. G. Thomas, M.D.
Surgeons.—J. B. Wood, M.D.; L. A. Sayre, M.D.; J. J. Crane, M.D.; B. Smith, M.D.; W. Parker, M.D.; A. B. Mott, M.D.; C. T. Meier, M.D.; J. W. S. Gouley, M.D.; W. H. Church, M.D.

NEW YORK EYE INFIRMARY.

CLINICAL INSTRUCTION AT ONE P.M.

CLINICAL DAYS.—Monday, Tuesday, Wednesday, Friday, and Saturday.
Surgeons.—J. H. Hinton, M.D.; F. J. Bumstead, M.D.; H. D. Noyes, M.D.

NEW YORK OPHTHALMIC HOSPITAL.

CLINICAL INSTRUCTION AT ONE P.M.

CLINICAL DAYS.—Tuesday and Thursday.

Surgeons.—Dr. M. Stephenson; Dr. J. P. Garrish; Dr. M. P. Stephenson.

PHILADELPHIA.

UNIVERSITY OF PENNSYLVANIA.

Hours.	Monday.	Tuesday.	Wed.	Thursday.	Friday.	Saturday.
10 A.M.	Carson	Rogers	.....	Rogers	Rogers	.....
11 "	Smith	Smith	.....	Smith	Smith	.....
12 M.	Pepper	Pepper	Med. Clin.	Pepper	Pepper	Med. Clin.
1 P.M.	Laidy	Laidy	Surg. "	Laidy	Laidy	Surg. "
3 1/4 "	Hodge	.....	Hodge	.....	Hodge	.....
4 "	.....	Carson	.....	Carson	.....	.....
4 1/4 "	Jackson	.....	Jackson	.....	Jackson	.....
5 "	.....	.....	.....	.....	.....	Laidy

JEFFERSON MEDICAL COLLEGE.

Hours.	Monday.	Tuesday.	Wed.	Thursday.	Friday.	Saturday.
10 A.M.	Dickson	Dickson	.....	Dickson	Dickson	.....
11 "	Gross	Gross	.....	Gross	Gross	.....
12 M.	Bache	Bache	Med. Clin.	Bache	Bache	Med. Clin.
1 P.M.	Pancoast	Pancoast	Surg. "	Pancoast	Pancoast	Surg. "
4 "	Meigs	Mitchell	Meigs	Mitchell	Meigs	Mitchell
5 "	Dunglison	Dunglison	Mitchell	Dunglison	Dunglison	Meigs

PENNSYLVANIA MEDICAL COLLEGE.

Hours.	Monday.	Tuesday.	Wed.	Thursday.	Friday.	Saturday.
10 A.M.	Taggart	Taggart	Hospital	Taggart	Taggart	Hospital
11 "	Halsey	Halsey	"	Halsey	Halsey	"
12 M.	Hartshorn's	Hartshorn's	Med. Clin.	Hartshorn's	Hartshorn's	Med. Clin.
1 P.M.	Gobrecht	Gobrecht	Surg. "	Gobrecht	Gobrecht	Surg. "
1 "	Meigs	Meigs*	Harlow*	Meigs	Meigs	Gobrecht
5 "	Harlow	Rand	Rand	Rand	Rand	Harlow

* Obstetrical Clinic on Wednesday at half-past ten A.M. After Dec. 1 Prof. Harlow will take the four o'clock hour on Tuesday and Friday afternoons in place of Dr. Meigs, who will lecture on Wednesday afternoon at the same hours.

PENNSYLVANIA HOSPITAL.

MEDICAL CLINIC, Wednesdays and Saturdays.

SURGICAL "

Physicians.—W. W. Gerhard, M.D.; J. J. Levis, M.D.; J. F. Meigs, M.D.; J. G. Smith, M.D.
Surgeons.—G. W. Norris, M.D.; E. Peace, M.D.; Jos. Pancoast, M.D.; E. Hartshorn, M.D.

PHILADELPHIA HOSPITAL.

Physicians.—J. L. Ludlow, M.D.; F. E. Luckett, M.D.; C. P. Tutt, M.D.; W. Maybury, M.D.
Surgeons.—D. H. Agnew, M.D.; S. D. Gross, M.D.; R. S. Kenderline, M.D.; E. J. Levis, M.D.

WILLS'S HOSPITAL.

FOR DISEASES OF THE EYE AND EAR.

CLINICAL DAYS, Mondays and Fridays.

Physicians.—J. J. Levis, M.D.; J. J. Reese, M.D.; S. L. Hollingsworth, M.D.; J. L. Tyson, M.D.
Surgeons.—S. Littell, M.D.; Wm. Hunt, M.D.; A. Hewson, M.D.

PHILADELPHIA LYING-IN CHARITY.]

OBSTETRICAL CLINIC, Saturday, 9 o'clock A.M.

Physicians.—E. Wilson, M.D.; J. M. Corro, M.D.

THE PUBLISHERS OF THE
AMERICAN MEDICAL TIMES

Announce that a Course of
Lectures on Dentition and its Derangements

BY

A. JACOBI, M.D.,

PROFESSOR OF INFANTILE PATHOLOGY AND THERAPEUTICS IN THE NEW YORK MEDICAL COLLEGE,

Will soon be commenced in this Journal.

DURING THE FALL AND WINTER

CLINICAL LECTURES

BY

PROFESSOR AUSTIN FLINT,

Will also appear regularly.

During the present Medical Session, in addition to the Clinical Lectures which are given in the Hospitals, Reports of the Practice of the Hospitals will be published in the **MEDICAL TIMES**, and accurate Reports of the Cliniques of the several Schools.

The Diseases of Women and Children.

By **GUNNING S. BEDFORD, A.M., M.D.**, Professor of Obstetrics, the Diseases of Women and Children, and Clinical Midwifery, in the University of New York.

Seventh Edition, carefully revised, 8vo. 658 pp.

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"Dr. Bedford's book is worthy of its author, a credit to his country, and a rich mine of instruction to the profession at large."—*British and Foreign Medico-Chirurgical Review, London*.

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"A work of great practical interest—one well calculated to interest and instruct the busy practitioner; it points out to him the most modern therapeutical agents, and their method of administration; and, above all, gives beautiful and satisfactory explanations, physiologically, of the symptoms of disease. This latter quality is a great merit of the book. As a faithful representation of the daily labors and duties of a physician of our day, and as an accurate delineation of the diseases of women and children, it is well deserving of our praise."—*Virginia Med. and Surg. Jour.*

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"We cordially add our testimony to its value as an eminently practical work, based upon the most approved physiological principles. We hope every practitioner and student will obtain a copy of the book."—*Atlanta Med. and Surg. Jour., Georgia*.

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"We have said, on former occasions, that the man who will bring forward clinical or practical instruction to bear upon the medical teachings of our country, will be immortalized. We want practical observations—fresh from the bedside. Dr. Bedford's volume is drawn from an extensive clinic, founded by him in the University of New York, and is fortified by much reading and research. This is a good book, and the profession owes Dr. Bedford hearty thanks for the labor he has bestowed upon it."—*Philadelphia Medical and Surgical Journal*.

Original Lectures.

LECTURES ON
STRICTURE OF THE URETHRA,
PRELIMINARY TO THE
CLINICAL COURSE ON DISEASE OF THE GENITO-
URINARY ORGANS.

DELIVERED AT THE UNIVERSITY MEDICAL COLLEGE.

BY
W. H. VAN BUREN, M.D.,
PROFESSOR OF ANATOMY, ETC.

LECTURE I.

GENTLEMEN:—In connexion with the lectures you have heard from Dr. Donaghe, on gonorrhœa and its sequelæ, I propose to give you a rapid *resumé* of the subject of stricture of the urethra, a disease which is the source of an immense amount of torture and anxiety to our sex, and in which the well directed resources of our art are capable of conferring a proportionate amount of benefit. To approach the subject properly, I must premise a brief sketch of the anatomy and physiology of the urethral canal—in the male, for my remarks will apply to it alone. This was so named by the ancients (*οὐρὸν* urine, and *τρέχειν* to run), because it is the vent-pipe of the urinary excretion; but this is not its only use, for it also gives issue to the seminal fluid; and to thoroughly grasp the diseases to which the canal is liable you must keep constantly in view this *double function* which it performs. The kidneys—the glands which separate the urine from the blood, the ureters—their ducts, and the bladder—into which it is received as a reservoir, are the urinary organs; the testicles—the glands which secrete the seminal fluid, the *vasa deferentia*—their ducts, the seminal vesicles, and the prostate gland, are the corresponding organs of the genital system; whilst the urethra constitutes the common outlet for the product of both pairs of glands, viz. urine and semen. Any obstruction, therefore, in this canal, interrupts the function of two distinct sets of organs—of equal importance to the individual and to the species. If it were the sole function of the male urethra to serve as an outlet to the urine, a length of two inches might have sufficed, as in the female; but we find this length of canal quadrupled, and three-fourths of it surrounded by a cylinder of erectile tissue (the *corpus spongiosum urethræ*), and intimately connected to the *corpus cavernosum penis*, with the purpose of forming an intromittent organ, by means of which the seminal fluid is to be conveyed to its destination. Thus we have three-fourths of the male urethra serving the purpose mainly of the genital organs, whilst more than half of its remaining fourth is surrounded by the prostate gland—an organ which I am disposed to regard as purely genital in its functions. You will recognise, therefore, that all the peculiarities of innervation which characterize the genital system, as well as those belonging to the urinary organs, are liable to be concentrated upon the urethra when it becomes the seat of disease—a consideration of no little importance in the management of stricture, as well as of the other diseases of which it is the seat.

The urethral canal, and all the hollow organs communicating with it, both genital and urinary, are lined by a mucous membrane continuous with the external integument at the orifice of the urethra, and terminating internally in the gland tubes of the kidneys and testicles; this continuous expanse of mucous membrane is designated as the *genito-urinary tract*. Most, if not all, of the inflammatory affections of the genito-urinary passages are seated in this membrane at their inception, and, during their earlier

stages, are confined to it. As in other expansions of mucous membrane, inflammation tends here to extend superficially to the bladder, ureters, and pelves of the kidneys on the one hand, when it commences, for example, in the urethra, and on the other, to the seminal vesicles, *vasa deferentia*, epididymes, and testicles. We shall confine our remarks hereafter to the mucous membrane of the urethra, and the parts by which it is immediately surrounded.

The best mode of examining this membrane is by removing the entire bladder, with the urethra and penis, from a recent subject, and slitting the canal along its upper wall, and continuing the incision through the upper wall of the bladder, by means of a stout pair of dissecting scissors, of which the blade introduced into the canal projects about three-fourths of an inch beyond its fellow, and terminates in a rounded extremity. In a dissection thus prepared, as the specimen, for example, now before you, the urethral mucous membrane is seen presenting a smooth shining surface, of a yellowish pink color, deeper in tint for an inch within its orifice, and also in the neighborhood of what is known as its membranous portion. A variable number of little pockets, recalling in appearance the valves of the veins, but smaller and solitary, called *lacunæ*, are to be seen scattered along the anterior half of the canal, and chiefly upon its roof. These are variable in size, and will sometimes admit a probe to the depth of one-third to half an inch; one of them, larger than the rest, is found pretty constantly in the roof of the canal, and about three-fourths of an inch from its orifice, and by this *lacuna magna*, as it is called, the point of a conical bougie, when of small size, is very apt to be arrested. To avoid it, remember that it is always situated in the roof of the passage, and direct the point of the bougie downwards, towards its floor. The use of these *lacunæ* is not clearly known.

By means of a good pocket lens, or a microscope of low power, a large number of minute orifices of mucous follicles can be recognised studding the surface of the membrane throughout its whole length; and by dissecting up a flap of it they can be seen imbedded in the submucous connecting tissue, in the shape of minute yellowish masses; they furnish the mucus by which the membrane in its normal condition is lubricated, and are occasionally the seat of abscess complicating gonorrhœa. At the membranous portion of the canal, and for an inch or two anterior to it, and also in that portion of it surrounded by the *glans penis*, there are well marked traces of longitudinal wrinkles, or *rugæ*, resulting from the constriction of its mucous membranes by the elastic and muscular tissues by which it is surrounded, and upon the summits of these *rugæ*, especially near the orifice of the canal, minute papillæ one-fourth to one-third of a line in length may be found. Beyond these features, which are recognisable on inspection, the lining membrane of the urethra possesses the usual characteristics of a mucous membrane; it is stretched upon a bed of connecting tissue, which contains the terminal ramifications of the blood-vessels and nerves by which its glandular follicles and its surface are supplied; this surface is invested by a layer of epithelium, the deeper cells of which are spheroidal or oval, whilst the superficial ones are columnar, except towards the last inch of the canal, where they all assume the scaly or pavement form, approaching in character the epidermic scales with which they become continuous externally. A drop of any of the morbid discharges from the urethra, placed beneath the microscope, will show more or less of these cells.

I have said that the mucous membrane of the urethra was stretched upon a bed of connecting tissue; now, on examining closely the deeper strata of this layer, they will be found to contain a certain amount of unstripped or involuntary muscular fibre, such as constitutes the muscular coat of the intestines; and these fibres are arranged both circularly and longitudinally, beneath its mucous membrane, throughout the whole length of the canal. In addition to the evidence of the microscope, the presence of this muscular layer is demonstrated by the power which the urethra

possesses of spontaneously expelling a partially introduced bougie; it will also contract spasmodically, through reflex nervous action, upon any chemical or mechanical irritant introduced into the cavity—such as a piece of caustic, or a rough bougie. John Hunter recognised the existence of this muscular contractility in all parts of the urethral canal, but it is only within the last ten years that the actual presence and mode of distribution of muscular tissue in this locality has been demonstrated, mainly by the labors of Kölliker, the German anatomist, and Mr. Hancock, surgeon of the Charing Cross Hospital, London. Its use is to expel the last drops of urine, or semen, from the urethra, as is proved by the dribbling of urine which occurs when it has been injured or destroyed in any portion of the canal, as in stricture. You can understand, now, how the longitudinal wrinkles of the urethral mucous membrane are produced, and also why it is that its mucous walls are always in contact when at rest.

After leaving the neck of the bladder, where the commencement of the urethra is marked by the slightly elevated fold of mucous membrane called the *uvula vesicæ*, it is surrounded, in its first inch and a quarter, by the prostate gland. This organ owes its title of gland to the fact that about one-third of its substance consists of an aggregation of follicles similar to those already noticed as scattered singly along the urethra; the remainder of its bulk is composed of involuntary muscular tissue, so that it is in fact a highly contractile organ. These follicles unite to form some sixteen or twenty ducts, whose orifices are distinctly to be seen opening into the floor of the urethra on either side of its median line, which is occupied by a prominent fold of mucous membrane about three-fourths of an inch in length, called, from its fancied resemblance in shape to the head of a woodcock, the *caput gallinaginis*. Near the anterior extremity of this little ridge or crest of mucous membrane, at its most elevated portion, is a slit-like orifice best demonstrated by directing a stream of air upon it from a blow-pipe, which leads obliquely backwards into a cavity, of variable size, lying beneath the floor of the urethra, in the substance of the prostate, and known as the *sinus pocularis*. This flask-shaped cavity, into which a probe can be readily passed to the extent sometimes of three-fourths of an inch, is lined by mucous membrane, and has no obvious function; it is in fact the analogue, in the male, of the uterus of the female, and hence called the *utriculus*. In either lip of its vertical orifice is situated the terminal opening of an ejaculatory duct, the common outlet of the *vasa deferentia* and seminal vesicles. The neighborhood of these orifices is richly supplied with nerves possessed of peculiar sensibility, the seat, in fact, of the sense of pleasure which accompanies the sexual act; and it is here that nitrate of silver is occasionally applied with the view of modifying morbid conditions of that function. The seminal fluid, mingled with the contents of the seminal vesicles, is poured into the urethral canal through these orifices, and its shape and capacity enable it to act as a momentary reservoir for it; narrow at the *uvula vesicæ*, and again at the apex of the prostate, it is dilated between these points into a fusiform cavity which is known as the prostatic sinus, and when this cavity is distended to its full capacity, the muscular tissue which constitutes so large a proportion of the prostate, is stimulated to sudden, powerful, and spasmodic contraction, by means of which the seminal fluid is discharged. At the same time, and by the same contraction, the prostatic follicles are emptied of their secretion, the office of which is to render the semen more fluid, and to facilitate its ejection. This I believe to be the true function of the prostate gland, so called; it is, rather, a compound body, mainly muscular in its nature, and contractile, of course, in its function.

Tracing the urethra through the prostate, we find it, in the next three quarters of an inch of its course, as an independent tube, i. e. composed simply of mucous membrane, connecting tissue, and unstriped muscular fibre, passing out of the cavity of the pelvis through a hole in the triangular ligament, which is situated just one inch below the summit

of the pubic arch. The triangular ligament, hence called, "of the urethra," is an expansion of fibrous membrane which closes that portion of the pelvic outlet bounded by the pubic rami, between which it is stretched. It is composed of two distinct layers, which, at the point where they are perforated by the urethra, are at least one-third of an inch apart, and in this space we find no less than three organs of some importance, viz., Cowper's glands, the artery of the bulb, and the *compressor urethræ* muscle, so called by Guthrie, the celebrated English army surgeon, who first pointed out its importance. Cowper's glands are simply two little pea-shaped masses of mucous follicles which pour their secretion into what is called the "bulbous" portion of the urethra, by means of two converging ducts about three-fourths of an inch in length. They are of little or no practical importance. The artery of the bulb, the largest branch of the internal pudic, which supplies the *corpus spongiosum urethræ*, need not concern us at present. But the *compressor urethræ* muscle, which I believe to be the true sphincter of the bladder, is an organ of very considerable importance in connexion with the use of instruments in the urethra. Its fibres take their origin from either margin of the pubic arch, at, and for an inch below, its symphysis; they join each other at the median line above and below the urethra, and in contact with its walls, in such a manner that by their contraction they are capable of completely closing its canal. The fibres of which this muscle is composed are of the striped variety, and they are completely under the control of the will. By bringing them into action we can at any moment during the act of micturition suddenly and certainly arrest the flow of the urine. I must ask your especial attention to the position and function of this muscle, which is not very difficult to expose in dissection. I have observed that it is always particularly well developed in the negro. It is not unfrequently the seat of spasmodic contraction, and often acts as an obstacle to the introduction of the catheter. In consequence of its close relation to the membranous division of the urethra, this is often called, especially by French writers, the muscular portion of the canal.

The direction of that portion of the urethra which is surrounded by the prostate, is downwards and forwards; the membranous portion of the canal pursues the same direction until it reaches the triangular ligament; whilst traversing the two laminae which compose this ligament, its course is a little more forwards than downwards, and after clearing the external lamina, it curves upwards between the two *crura* of the penis, as they converge to form the *corpus cavernosum*, and at the point where they meet, it becomes connected to the under surface of the penis, along which, in the median line, it continues to its termination, surrounded by a cylinder of erectile tissue called the *corpus spongiosum urethræ*. The *corpus cavernosum penis* is attached to the front surface of the *symphysis pubis* by means of a strong fasciculus of inelastic white fibrous tissue, called the suspensory ligament of the penis; this ligament is inserted into the upper surface of the *corpus cavernosum*, just at the convergence of its *crura*, and opposite to the point at which the urethra joins it below.

You will observe then, that the urethra, throughout its prostatic and membranous portions, and at the commencement of its spongy portion, forms a decided curve, fixed at both extremities and in the middle. It is fixed at its commencement, within the pelvis, by its connexion with the neck of the bladder and prostate gland, and these are held in their position by their proper ligaments and by the pelvic fascia; it is closely attached, in its middle portion, to the margins of the opening in the triangular ligament, in its passage out of the pelvis; and externally, it is firmly connected to the anterior surface of the *symphysis pubis*, by means of the suspensory ligament of the penis, of which organ it has become a part, and by the *crura* of which it is also firmly fixed to the pubic rami on either side. Now it is of great practical importance that we should be familiar with the exact dimensions of this curve, in order to shape

our sounds and catheters in accordance with it, and thus facilitate their passage through it into the bladder. Accordingly it has been found, by repeated and accurate measurements, that the fixed portion of the urethra approximates very closely to an arc of a circle three inches and a quarter in diameter. This has been demonstrated by the labors of Mr. Briggs, of the London Lock Hospital, and others. Now my experience in the use of instruments in the urethra has taught me that they are easy of introduction, other things being equal, just in proportion as they approximate this curve; I have tried it for a number of years, and advise you to adopt it; it is deduced from sound anatomical data.

The spongy division of the urethra is about six inches in length, and takes its name from the cylinder of erectile tissue by which it is surrounded, and by which it is assimilated to the structure of the penis, of which it forms a part; it lies in a groove on the under surface of its double corpus cavernosum, like the ramrod of a double-barrelled gun. The *corpus spongiosum urethrae* swells out into a rounded enlargement posteriorly, which is called its bulb; this lies below the canal of the urethra, and is closely connected with the anterior lamina of the triangular ligament. Anteriorly it terminates in an acorn-shaped enlargement—the glans penis—which lies mainly above the canal and surrounds its slit-like orifice. The erectile tissue composing the corpus spongiosum is inclosed by an elastic fibrous membrane, the inner layer of which is in immediate contact with the urethral walls. It is easy to understand, therefore, how lacerations of these walls may readily involve its vascular structure, and occasion free bleeding; how inflammation may extend to it and explain the occurrence of chordee, and ultimately cause the solidification and contraction of its spongy tissue which can often be felt by the finger opposite to a permanent stricture.

A few words, in conclusion, as to the dimensions of the urethral canal, which are of the highest importance. Its average length is fairly stated at about eight inches, its several divisions occupying the proportions already stated. This is demonstrable by marking the exact point upon a catheter at which the urine begins to flow, and then measuring the distance between this point and the eye of the instrument. Measurements of the parts removed from the body after death do not vary materially from this; they are generally a trifle greater. The average diameter of the canal is about half an inch, but it varies considerably at different points. Thus its external orifice is the narrowest portion of the urethra, measuring from three and a half to four and a half lines; there are two other narrow points, viz. at the junction of the membranous and spongy portions, and at the internal extremity of the canal, opposite the *uvula vesicae*, where it measures about five lines. Thus it is obvious that an instrument which will enter its orifice, must of necessity pass readily through the whole canal, unless narrowed by disease or deformity. There are also three points at which the urethra presents its greatest measurements in diameter, viz. at the centre of the *fossa navicularis* just within its orifice; at the sinus of the bulb—in front of the junction of the spongy and membranous divisions; and in the prostatic sinus. At these points its diameter may be estimated at seven, eight, and nine lines respectively.

These measurements are of course approximative, and represent the average of numerous experiments. They are most correctly ascertained by casts of the urethra taken after death in wax, plaster, or fusible metal. In old age the dimensions of the canal are somewhat greater, in consequence of the diminished contractility of the organic muscular tissue which enters so largely into the structure of its walls.

SCROFULA.—Dr. Gregory, of Edinburgh, asserted as his belief that there was not a single family in Great Britain in which scrofula did not exist.

Original Communications.

A CASE OF CARTILAGINOUS TUMORS OR ENCHONDROMA, WITH REMARKS.

BY WILLIAM HENRY CHURCH, M.D.,

SURGEON TO BELLEVUE HOSPITAL.

JAMES A. COVILL, 14 years of age, born in the United States, has suffered with the above disease since early childhood. At fourteen months of age the second finger of his left hand was caught in a door; the physician who saw him told his mother that the finger was broken, and treated it as a fracture. The mother says the swelling never entirely disappeared. Eighteen months after receiving the injury, a decided tumor made its appearance on the second phalanx of the finger, at the point of fracture; the first phalanx of the same finger simultaneously began to swell throughout its whole extent. These changes began without any apparent exciting cause, with but little pain, and no constitutional derangement. Soon after another tumor appeared upon the metacarpal bone of the index finger, near the metacarpo-phalangeal articulation, and on the dorsal surface. The disease continued to advance from the first phalanx of the second finger until the motion of the joint became impeded, and the second metacarpal bone extensively involved. I am thus particular in describing the appearance and progress of the tumors, in order to show that the disease did not appear in, or involve the cartilages of, the joints during the early stage of its progress. Between the age of four and five years he had typhus fever, when the large tumor upon the second finger began to enlarge, and he looks upon that as the period from which to date the rapid increase in the size of the lumps and spread of the disease. At seven years of age he fell upon the ice, and a companion accidentally stepped upon the hand; the whole hand was severely contused, but he does not think the advance of the disease was accelerated by the injury. Two years after, the largest lump began to grow, and in May, 1854, the integuments, to the size of a quarter of a dollar, sloughed from the tumor next to the largest in size, followed by copious suppuration, leaving a cavity one inch in depth, which soon filled up, to be covered by a firm cicatrix. At that time he consulted an herb-doctor, who treated it by repeated sweating with his sovereign remedies, which made their success most apparent by a rapid increase of the disease. He now suffered more pain than formerly, but of a dead heavy character, apparently as much owing to the size of the hand, and probably more, than from the character of the disease; yet the discomfort was so great as to make him willing and desirous to have the hand removed.

August 25, 1854.—The patient being under the influence of chloroform, I removed the hand at the wrist joint, by the double-flap method. After securing the arteries, the flaps were brought together without disturbing the synovial surface, or removing any portion of the radius or ulna; the parts united promptly with but slight inflammation or suppuration, so that the whole was well in two weeks. Four months after the operation, he has a good stump, no pain, and his general health is perfect. Prof. J. C. Dalton was kind enough to examine a portion of the tumor under the microscope, which he found to "consist simply of cartilage in process of partial ossification: most of it was pure cartilage, but there were spiculæ of bone projecting into it in various directions. There were no other elements than these to be found." The cartilaginous deposits, as he delineated them, had precisely the same appearance of the nuclei as represented by Mr. Paget in his work on Surgical Pathology, at page 425.

Enchondroma was first used by Müller to designate a

growth; sometimes named osteo-chondroma or benign osteo-sarcoma. Mr. Paget objects to the last name as being vague, and it has the additional objection of conveying the impression that it is to a certain degree a malignant growth. Mr. Paget has been so successful in his classification of tumors, that I doubt not the class of cartilaginous tumors of which this is a specimen, will, in future, receive the distinctive title of cartilaginous tumors, or enchondroma.

This disease is accurately described by Mr. Miller in his *Principles of Surgery*, as being connected with bone, peculiar to early years, and usually attributable to external injury. The growth, slow and painless, is most frequently found in the metacarpal bones and phalanges of fingers. The articulating cartilages are not involved, but form the limits of the growth in that direction; and adjacent tumors have no tendency to coalesce. Before entering upon the subject in general, let us look at the class of which this specimen is such a perfect type.

This growth is strictly benign, beginning within the bone, and so far as we can learn, invariably confined to childhood, appearing often before birth, but never after puberty. There are about fifty cases now recorded of this malady, all developed before the age of fifteen; in none was there any appearance of malignant disease, although it has reappeared after removal—as in Mr. Salmon's case, of which before dissection this specimen was a perfect copy, his being the right hand, this the left. Mr. Paget gives a sketch of it in his work, and speaks of it as being the most remarkable yet seen, having been removed from a man fifty-six years of age, from whom, when he was sixteen years old, the fore-finger of the left hand was amputated; the little finger of the same hand having a tumor as large as a walnut; he has irregular nodules on his left tibia, and some enlargement exists at his second toe of the same side. There is little or no tendency to degeneration, even when, after many years' duration, ulceration of the investing integuments may have occurred; the surrounding textures are not involved, but pushed aside. Although attacking all parts of the skeleton, it is most frequently found in the metacarpal bones and phalanges of the fingers, yet the articulating cartilages never are involved in the disease, but form a limit to the growth, necessitating the formation of a number of tumors on one hand, which, whatever may be their tendency, are thus debarred from coalescing. The growth is painless and usually slow, except when aroused to action by some exciting cause, as a blow or irritating applications, the latter frequently causing the integuments to slough; and where several tumors are developed simultaneously, they are the result, not of a constitutionally malignant cause, but rather of "the widely spread influence of the exciting cause, which in most instances is a contusion."* Nearly all the phalanges and metacarpal bones of one or both hands may be simultaneously attacked by this growth, frequently projecting from only one side of a bone, expanding into irregularly round, smooth, and oval masses, elongating the fingers, and interfering with or totally preventing the movements of the joints.

From this growth, beginning within the bone, the medullary cavity of a metacarpal bone can be filled with cartilage without changing the external appearance. Consequently the surgeon may amputate the finger where it has expanded into a tumor, leaving the disease above to reappear, as in the boy operated upon by Mr. Lawrence, who did not suppose the metacarpal bones or the second phalanges affected by the disease, until the operation was being performed, when their medullary cavities were found to be filled with cartilage.

We also have the cartilaginous tumor appearing upon the fingers external to the bone, between the bone and periosteum, but these are usually isolated tumors, and may be removed without injury to the shaft. When this disease appears in other parts of the body, it takes upon itself new

characters and new complications. It may appear in three distinct structures: 1, in the medullary cavity or within the bone; 2, external to, or between the bone and periosteum; and 3, among the soft tissues more frequently found in the region of the parotid gland.

1st. The adventitious growth is developed in the interior of the bone. The deposit gradually takes place in the cancellous texture when the external denser portion, or shell, is proportionally dilated. This outer covering, though attenuated by the disease, would be unable to envelope the growth as it does, except that nature, from time to time, supplies additional osseous matter, for a long time maintaining its continuity. Gradually the bony covering becomes thinner, until at points it is wholly destroyed—although retaining their smoothness and spherical shape, in many cases, to the touch, they become so elastic as to convey the impression that they contain fluid—having frequently been punctured, and in one case to my knowledge, greatly reduced the patient by the hemorrhage.

2d. The second variety is formed on the external surface of the bone, covered only by the periosteum and other soft parts. It is generally met with in flat bones; the cranium, pelvis, or ribs; the form is less regularly spheroidal, and the surface more unequal, than in those originating within the bone. They are generally fastened to the natural surface by outgrowths of new bone. This ossification, beginning on the surface of the bone, forms an expanded base from which to extend into the substance of the cartilage, even so far as to have changed the whole cartilaginous mass into bone. But these attachments vary as to size, sometimes not being larger than a pipe stem.

3d. Lastly, it may appear among the soft tissues more frequently found in the region of the parotid gland, but met with pure or mixed in the testicle, mammary gland, subcutaneous tissue, lungs, and soft parts near bones.* These may be composed of cartilage only, but a large proportion contains fibrous cartilage mixed with other tissues; either wholly surrounded by the gland, or included in its substance. "Bennet upon Cancerous and Canceroid Growths," at page 108, gives the history of a tumor affecting the humerus of a girl fourteen years of age, and remarks that true cancer of the bone and enchondroma, so-called medullary sarcoma, as in the present case, so closely resemble each other to the naked eye, that they always have been confounded.—Again, at page 112, is described a case of this disease involving the ischium and pubes, where the patient died without an operation, and the disease was supposed to be cancer—more careful scrutiny, however, detected peculiarities which threw doubt upon this conclusion, and consequently he was induced to investigate the growth more thoroughly. "Sections with Valentine's knife soon proved that the tumor was really cartilaginous, softened in some places, and closely resembling cancer." He also mentions a tumor occurring in the parotid region, fibro-cartilaginous in its character. He suggests that we may possibly find it in other growths and with true cancer.

Many physicians in the city of New York will probably remember two strikingly similar cases to those given by Mr. Bennet—one of a young girl in the New York Hospital, who died exhausted with an immense tumor beginning in the humerus, smooth and round, with that elasticity which is so often mistaken for an accumulation of fluid or pus; it also ulcerated, but the part was soon covered by a firm cicatrix. I remember, at the autopsy, being struck with its light pinkish jelly-like appearance; and the knife passed through it with that peculiar crispy sensation which you experience in cutting cartilaginous tumors.

The other was the "bony tumor arising from the pelvis," removed by Dr. J. Kearney Rodgers, the history of which he published in the *New York Journal* of July, 1839. "This tumor was firmly united by bone to the body and ramus of the pubes, the cancellated structure of which was

* Müller.

* Paget.

enlarged. . . . but did not project into the cavity of the pelvis." The patient died from the shock to the nervous system, the operation having been very severe and protracted, owing to the size of the tumor. He asks if the disease was of a malignant character? From the description, this tumor resembles those spoken of as beginning cartilaginous, and as they advance, becoming bony. With the knowledge acquired by the modern pathological and microscopical investigations of such men as Rokitsansky, Müller, Paget, and Virchow, I think we would be justified in giving a favorable prognosis in a similar case, provided the operation was performed before the tumor had attained such an enormous growth.

These tumors of the hand appearing at an early age, are sufficiently characteristic to be easily recognised—at all events there is not so much danger of confounding them with malignant disease as where they occur in other parts of the body upon persons further advanced in life. When we come in contact with these abnormal growths they almost invariably present some point of obscurity or uncertainty, clouded by anxiety as to their component parts. But these doubts are usually cleared up upon the removal of the mass; if not, the all-pervading eye of an intelligent microscopist will determine whether the disease be benign or malign. Here it is that the charlatan plays upon the credulity of his innocent victims—by a tedious and painful process destroying an innocent tumor, which, under the influence of chloroform, might have been removed without pain, in a few moments, by the hands of a skilful surgeon. But the evil working of these men does not cease here. They persuade their dupe that their skill has removed a cancer, never to return, owing to the remedies employed. The patient hastens to his or her relations to announce that in their family a cancer has taken root, the seeds of which are to be feared through every succeeding generation, whereas, only a harmless mass of disease has been removed without the slightest trace of cancer in it.

Where this disease appears in other parts of the body than the hands and feet, it is not so well marked, and consequently not so easily distinguished from other outgrowths. In such cases it does not necessarily make its first appearance in childhood; appearing on the contrary, at all periods, from early youth to advanced age. According to the above authors it is met with as pure cartilage, cartilage in the process of ossification, and the recurring cartilaginous tumor. Then we find it mixed with malignant disease, glandular tissue, imbedded in the fibro-cystic tumor of the testicle, fibro-recurrent and myeloid tumors. "Such combinations are not, I believe, imitated in the cases of any other structures found in tumors; even those that are thus combined with cartilage, do not, I think, combine with one another, if we except the cases of intra-uterine morbid growths. As yet, however, the interest that belongs to all these inquiries is scarcely more than the interest of mystery and of promise to future investigations."*

ON SYPHILIZATION.—Professor Hebra, in giving an account of some trials he has made of syphilization, states that without as yet being able to range himself either with the abettors or opponents of the practice, he is enabled to say that his syphilitic patients, during the employment of the repeated inoculations of the matter of chancre, continued very well, and of good appearance, increased in weight, and gradually lost all signs of syphilitic disease. The course of the symptoms much resembles that which they take under the action of mercury or iodine, but was somewhat slower. A series of comparative trials with various remedies, has, however, convinced the author that for producing a rapid and certain cure the mercurial treatment deserves the most decided preference to all other means.—*Zeitschrift der Aerzte zu Wien*, No ix.

* Paget.

Reports of Hospitals.

LONG ISLAND COLLEGE HOSPITAL.

SUPERNUMERARY FINGERS HEREDITARY FOR FIVE GENERATIONS.

[By JOHN G. JOHNSON, M.D., Surgeon to the Hospital.]

The patient was a perfectly healthy well developed child. In addition to the number of fingers usually found, this child had a superfluous finger on each hand. It was attached to the outer side of the little finger about the middle of the first phalanx. The supernumerary fingers had nails, and were attached to the little finger by a thick pedicle; on being cut off a small arterial jet was noticed. There was a well-developed bone in each finger the size of that of the normal fingers. This was the fourth child of its parents, all of which had supernumerary fingers except the second. The first child, a boy, had a supernumerary finger on his right hand at the same point as the fourth child. The third child had two supernumerary fingers, one on each hand, and at the same point, about the middle of the outer side of the first phalanx of the little finger. The mother had one supernumerary finger on the right hand at the same joint. The grandmother (the mother's mother) had two supernumerary fingers; and the great grandmother had two supernumerary fingers, and a portion of the bone of the finger which was not fully removed shows clearly the point of origin. The grandmother's brother had supernumerary fingers on each hand, also one of his nephews has the same deformity. The great-grandmother states that her father had the same deformity. One of the child's cousins has also these superfluous developments. We have here a deformity perpetuated through five generations clearly traced.

COMPOUND DISLOCATION OF A LONG BONE.

[Reported by R. K. BROWN, House Surgeon.]

On the 13th inst., a boy, set. 10, was brought to me by my friend, Dr. Dudley, who met him in the street in great distress and alarm, having a compound disarticulation of the second and third phalanges of the ring finger of the left hand. The child stated that in playing "base" the finger named had received the full force of the ball violently thrown against the digital extremity of the second phalanx, completely denuded to the periosteum and protruding through the palmar surface for one-fifth of an inch above the integument. The third phalanx hung loosely below on a plane which formed an acute angle with the projecting end, the under surface of which was caught firmly by the edge of the second integument like an edge of a button-hole holding a button. With the paleus upwards I passed a fillet of muslin around and between the connexions of the index and middle fingers as a means of extension, and effected the reduction by manipulating with the lower phalange. A gutta percha splint was then immersed in hot water, neatly moulded to the dorsum of the finger, and bandaged on. The result is that already (Aug. 30th) the boy is able to use the finger precisely as before the accident, their being a complete restitution of articulating power.

This case has no more interest than of increasing the number which, in modern surgery, demonstrate the error held by the surgeons of the past, which was, that complete reduction of compound luxations of the long bones (among the smallest of which rank the phalanges) was a dangerous proceeding. They advocated leaving the bone unreduced or amputation. My estimable instructor in surgery, Dr. Frank H. Hamilton, has shown that a section of the articular end of the bone is in nearly every case of compound luxations to be preferred to either of the above alternatives; and this case shows that in compound luxations of the smaller long bones no harm does ensue from an immediate return of the dislocated ends to their accustomed place.

JOURNALS FOR SEPTEMBER.

ATLANTA MEDICAL AND SURGICAL JOURNAL.—Sept.

ART. I. *Spider-Bite—Severe Symptoms and Unusual Phenomena*, by Dr. J. T. BANKS, Griffin, Ga.—Patient, a boy between five and six years of age, was bitten by a black spider near the anus; wound presented a small, white, elevated, circular spot, without swelling or redness; pain lasted about ten minutes, when he was seized with violent paroxysms of pain in the stomach, of from ten to fifteen minutes' duration, followed by distinct intermissions of from thirty seconds to one minute; abdominal muscles rigidly contracted; face and neck red; circulation slow and feeble; perspiration free; nausea, with frequent efforts to vomit. Treatment: Whiskey, $\frac{1}{2}$ i. every half hour, and also six or eight drops of laudanum combined with aq. ammoniac, until he had taken sixty or eighty drops of laudanum, when the latter was suspended. The penis was now observed in a state of erection, and there were frequent ineffectual efforts to micturate; a tobacco poultice soon relieved the priapism, which returned after a copious flow of urine, and continued, with few remissions, as long as the system was under the influence of the poison. Patient recovered. ART. II. *Clinical Lectures*, by Prof. JOHN W. JONES, in the Atlanta Medical College.—*Dentition and Diarrhoea* treated by lancing the gums; bread and milk diet, alternated with boiled rice and hydrarg. cum cret. gr. ij. every other night. *Dysmenorrhoea and Leucorrhoea* in a negro woman, aged 38.—Recommends an emulsion of copaiba, tinct. iodine, and solution of nitrate of silver, separately, as injections in vaginitis and leucorrhoea. *Partial Insanity*.—Negro woman was carried from Virginia to South Alabama, and set to work as a field laborer, to which she was unaccustomed; had symptoms of malarial fever, for which gave her large doses of quinine; has severe headache, mental derangement, and labors under constant apprehension of punishment. Imputes her condition to the combined influences of nostalgia and over-doses of quinine. *Aphrodisiasmus.—Convulsions and Mental Derangement* in a man about 40, resulting from a blow upon the left parietal protuberance, fracturing both tables of the skull; treatment, trephining. *Asthma*. ART. III. *Clinical Lectures*, by Dr. J. G. WESTMORELAND.—*Case of Nervous Rheumatism*. ART. IV. *Ethereal Tinct. Valerian in Convulsions in Children*, by Dr. B. W. HARDEE, Savannah, Ga.—The author has found valerian in this form to allay convulsions in young children, from whatever cause. Two cases are related of convulsions from the presence of worms in the intestinal canal. To a child three years old he administered forty drops of the tincture in flaxseed tea, per rectum once, and six drops by the mouth every fifteen minutes; and as soon as all twitching of the muscles ceased, the following powders, one every hour: R. hydrarg. chlor. mit. grs. iij., pulv. spigel. grs. viij. M. ft. ch. no. iij.; the last to be followed by a dose of castor oil and turpentine. Other cases were treated in a similar manner, with slight variations.

THE ST. LOUIS MEDICAL AND SURGICAL JOURNAL.

ART. I. *Muriated Tincture of Iron in Erysipelas*, by Dr. CHARLES H. HUGHES, Warrentown, Mo.—The cases were all treated with cathartics, diuretics, diaphoretics, and the muriated tincture of iron, in doses of forty to sixty minims every hour, and cooling applications externally. The writer considers cathartics, diuretics, etc., useful in assisting nature to eliminate the poison from the system, and the drop is the *sine quâ non* in sustaining the system whilst elimination is going on, whether left to nature or art. A point of interest is, that the three severe cases reported occurred at different times in the same individual. ART. II. *Interlopers in the Regular Profession of Medicine*, a chapter on Ethics. ART. III. *Passive Congestions*, by C. L. CARTER, M.D. ART. IV. *Case of Nephritis*, by Dr. W. H. MUSGROVE, Clark Co., Mo.

CHARLESTON MEDICAL JOURNAL AND REVIEW.—Sept.

ART. I. *Post-Partum Hemorrhage*, by Dr. T. G. THOMAS, —A lecture delivered in the University Medical College.

and previously published in the *New York Journal of Medicine*. ART. II. *Obstetrical Cases*, by Dr. T. P. BAILEY, North Santee, S.C.—The fifth case was one of arm presentation, delivery being accomplished with great difficulty during violent uterine contractions; pelvic abscess supervened; but the patient recovered by the aid of tonics, nutritious diet, and a good constitution. ART. III. *Results of some Researches on Hypnotism*, by Drs. DEMARQUAY and GIRAUD-TULON, by WILLIAM MOSS, M.D., of Philadelphia.—The observations which obtained any result were females, most of whom were affected with some uterine disease; no result being obtained from observations made upon males and healthy females. They arrive at the conclusion that "hypnotism can seldom or never be used as an anæsthetic; that it may relieve certain neuralgias or nervous attacks; that its really valuable properties have been hitherto unobserved, as the resemblance between many of its manifestations and some physiological processes, the successive isolation of the different senses, and the potent auxiliaries we have acquired in these properties for further researches in the workings of the mental faculties."

NEW ORLEANS MED. NEWS AND HOSPITAL GAZETTE.—Sept.

ART. I.—*Cases of Pneumonia at the Charity Hospital*. By AUSTIN FLINT, M.D.—Sixteen cases are reported, nine of which were fatal, and all complicated. Of the fatal cases, the complications were of pericarditis, four; delirium tremens, four; yellow fever, one; in one case, parotiditis and typhoid symptoms, and in one, delirium tremens and pericarditis were combined as complications; and in several instances the pneumonia supervened upon some previous illness. In six of the fatal cases, either the entire right lung or the upper and lower lobes were involved; in one the lower lobe of the right, in one the lower lobe of the left, and in one the upper lobe of the right lung; of the three latter, two were complicated with delirium tremens, and one with parotiditis and typhoid symptoms. The fatal result is supposed to be due to the complications rather than the pneumonia, from observations made upon six cases, in four of which the pulse did not rise above 120 in a minute, in one case not over 100, and in the other it was 152 when admitted. The respirations did not exceed in one case, 24; in one, 26; in one, 28; in two, 36, and in one, 40 per minute. The complications in most of the cases, were developed when the patients first came under observation, and the treatment was sustaining. "The cases in which a fatal result did not take place, are of interest as furnishing illustrations of recovery under circumstances investing the disease with a degree of danger which does not belong to it intrinsically." The complications were, one, pericarditis; one, dysentery; two, bronchitis; one, delirium tremens; one, phlebitis, affecting the femoral vein; one, fracture of the ribs. Other unfavorable circumstances accompanied some of the cases, one having travelled on foot for several days, sleeping on the ground at night; one had suffered from intermittent, and syphilis; one had been in ill health for two years, and one was preceded for several days with dysentery; in two cases the inflammation extended over the entire left lung, in one over the entire right, in one over the lower lobes of both, in three the lower lobe of the left. In one case the pulse reached 144 per minute; in one, 140; in one, 134; the respirations reached in one to 68; in two, 40; in one, 36; and in two, 32. The same general plan of treatment was pursued as in the fatal cases, and even the uncomplicated cases did not require depressing measures. ART. II. *Case of Spermatorrhoea*. By F. FORMENTO, Jr.—The case was accompanied by serious symptoms of gastric disturbance, impairment of vision, etc., and after resisting various general remedies, was at length radically cured by cauterizing the part and the frequent use of the cold hip bath. ART. III. *Tetanus*.—In the opinion of the writer, *trismus nascentium* is peculiarly a disease of the negro, appearing at times in an epidemic form, and is thought to originate from irritation about the cord—probably some defect

in cutting or dressing. Some adopt the custom of giving the child one grain of calomel at one day old, and touching the cut surface of the cord with turpentine, and claim to have obviated the disease. It occurs most frequently in warm, damp weather of winter and spring, the exciting cause being probably poison generated in the wound. Tetanic spasms from teething, worms, etc., are curable or abate spontaneously; but the writer has never cured a case of well developed traumatic tetanus, and is not sure that he ever obviated one. He has seen more cases from burns about the chest and abdomen than all other accidents, next from lacerations in machinery, last from amputations. Among over a hundred instances of persons running nails into their feet, of all sizes and to all depths, he never saw tetanus follow, the hole generally is enlarged and drosses of lint or cotton, saturated with turpentine, thrust in. The disease once developed, he knows of no reliable remedy.

THE CHICAGO MEDICAL EXAMINER.—Sept.

ART. I. *Inflammatory Affections of the Female Breast.* By PROF. W. H. BYFORD, of Chicago.—Term "Milk Abscess" should be confined to inflammation and suppuration of the distended milk reservoirs, depending upon some obstruction in the nipple tubes, discharging a mixture of milk and pus, resulting often in milk fistulae, but never in those deep ungovernable sinuses that sometimes trouble us in glandular inflammation. In treatment, the writer recommends the early employment of the prophylactic means usually applied to the nipple, especially light covering and frequent exposure to the air, both during pregnancy and lactation. Simple abrasions and fine chaps are best treated with mucilaginous applications or mild ointment; if deep fissures exist, the sides may be pressed closely together, and a thick layer of collodion applied; astringents and stimulants admissible only when ulcerations have become chronic. We begin the treatment of milk abscess by rectifying any malformation of the nipple, either congenital or acquired, the difficulty often being due to this source, either constricting the tubes or causing them to bend at such an angle as to prevent the free egress of milk, and often requiring treatment during pregnancy. When inflammation has fairly begun, our first object is to keep the reservoirs empty, the mouth of the adult being the best means, as it is able to vary the pressure and force to suit the tenderness of the part; then follow measures calculated to suppress the secretion, of which belladonna ointment, if carried to a sufficient extent to produce its characteristic effects upon the system, seems to have acquired the most renown; cold applications to the part affected, occasional saline cathartics, and small doses of iodide of potassium. Glandular inflammation, if seen early, may be relieved by warm fomentations, followed by venesection, and verat. viride, with calomel and morphia, the antiphlogistic treatment being continued until suppuration is evident; well regulated pressure, as encasing the whole gland in collodion, and if suppuration has occurred, early evacuation of the pus, and if troublesome sinuses are formed, the injection of iodine. The contents of milk abscess should be evacuated early by a small opening, and if a fistula remains it may be closed by occasional application of nitrate of silver in pencil.

ART. II. *Notes on Surgical Cases.* By Dr. E. ANDREWS, Prof. Surg. in Lind University. *Talipes varus and valgus in the same patient.*—Operated first for varus, by dividing the tendo-achillis, and tendon of tibialis anticus, then a crucial incision over the external malleolus, and with a saw resecting the ankle joint, removing the lower part of the fibula and tibia and upper part of the astragalus; erysipelas supervening was treated with tr. iodine and ice externally, and tr. ferri mur. internally. Next, operated on the other foot for valgus by dividing the tendons of the three peronei muscles, and the external lateral ligament of the ankle, forcing the foot into its proper position and confining it by appropriate dressings. *Cataract*; operation by solution.

ART. III. *Poisoning by Laudanum.* By Dr. H. WARDNER.

—The cases reported illustrate the cold water treatment; in two of them all efforts to arouse were unsuccessful until a stream of cold water was poured upon the head from a distance of three or four feet, and continued at intervals of ten to twenty minutes. ART. IV. *Paraplegia.* By Dr. J. CERF, Wheeling, Ill.—Treated by magnetic electricity, strychnine, and vesication; patient entirely recovered. ART. V. *Clinical Report.* Service of D. N. S. DAVIS.—*Chronic Dysentery* of over a year's duration. This may depend upon a thickened and indurated condition of the mucous membrane, local ulceration of the intestinal canal, often the sequel of typhus or typhoid fevers, or tubercular deposit in the mucous membrane of the intestinal canal, each condition modifying the treatment. *Typhoid fever.* Attention is called to the diagnosis between paroxysmal cases of continued, and those of true remittent or malarious fever, a case of the former given and its treatment with blue mass, quinine, turpentine, and opium; engorgement of the lungs occurring, brandy punch was freely administered with injury to the patient, when a mixture of strychnine, nit. acid, and tr. opii was substituted with nutritious diet, upon which the patient improved. Prof. D. arranges the grave cases of typhus and typhoid fever into four classes, viz. those in which life is endangered from direct failure of the cerebral functions; those in which the most alarming symptom is feebleness of the heart's action, from early tendency to softening of its muscular structure; those in which respiration is impaired from engorgement, etc., and those in which life is endangered from disease and disorganization of the mucous membrane of the intestines. The first class of cases are the only ones in which he has observed any beneficial results from alcoholic stimulants.

THE MARSHALL HALL TREATMENT OF THE DROWNED.—The philosophic method of treatment of the apparently drowned which Marshall Hall bequeathed as the last great legacy of his genius and philanthropy meets daily with new and successful application in cases of accident, and often succeeds most in restoring life where it is apparently extinct. The National Life-Boat Institution, clearly perceiving the vast importance of any improved method for restoring animation to the apparently drowned, and puzzled by the obstinate adherence of the Royal Humane Society to their old and imperfect system, of which Marshall Hall clearly demonstrated the inefficiency in these pages, sought the opinion, by a circular, of the most eminent medical men and medical bodies in this country and on the continent. They received the favorable opinions of three hundred medical practitioners in this country, and of the principal medical societies here and abroad, in regard to Marshall Hall's method, now so universally adopted throughout the profession, and so often the means of saving life. These directions have therefore been extensively circulated by the Society throughout the United Kingdom and in the colonies. They are also in use in her Majesty's fleet. Three cases have just been reported, in which five persons apparently dead have, after long submersion, been successfully treated by the Marshall Hall method and restored to consciousness. Two of them occurred to bathers in Victoria park. It is a high merit of this method that its simple rules admit of being practised instantly by an unprofessional person until medical aid can be obtained. It was thus that in these instances life was restored by a swimming-master and by some sailors respectively. In one instance, the person saved was picked up from a capsized boat at sea, and was successfully restored to consciousness by the sailors while bringing him ashore. It was believed that if these means had not been employed during the time occupied in reaching the shore, he would have been past recovery. These facts proclaim their own importance; and while the medical profession can hope to bestow boons of such value on humanity, it may expect to retain its hold on the esteem and gratitude of mankind.—*Lancet.*

American Medical Times.

SATURDAY, OCTOBER 20, 1860.

SCHOOLS OF PHARMACY.

SECOND only in rank of importance to the subject of medical education, is that of pharmaceutical education, if, indeed, they can with propriety be considered as separate subjects. If not inseparable in everything except name, they are at least so very closely allied that collateral influences affecting the one invariably exert equal and similar effect upon the other. The object of either science being to perfect the resulting art, it is in the practical application—the applied science—the practice of medicine and the practice of pharmacy—wherein the close relationship and mutual dependence is so palpable that it can scarcely escape any ordinary understanding. What is the practice of medicine without the materials by which its aims and objects are mainly reached, which materials pharmacy alone perfects and supplies? The answer is that it can be little else than a valuable system of hygiene, which, failing from the numerous accidental causes which interfere with human health and life, leaves only barren expectantism, or some other more patent form of extravagance or quackery. What is the practice of pharmacy without the practice of medicine for its legitimate dependence? The answer is, but quackery again—soda water and patent medicines in the main, or toilet and fancy articles at best. When, or whilst the standard of medical education is low, that of pharmaceutical education cannot be elevated, because the art of pharmacy depends upon and is maintained by the art of medicine. On the other hand, whilst the standard of pharmaceutical education is low, the science, and consequently the art, of medicine, cannot be duly progressive, because the progress of both the science and art depends upon multiplied observation and experience, and such observation and experience must be inaccurate, unreliable, and uncertain, however multiplied or accumulated, when based upon the uncertain grounds of unscientific, bad, or ignorant pharmacy. For instance, what are practical observations upon the therapeutic action of digitalis, or mercury with chalk, worth, no matter how accurately made, or how far multiplied, so long as pharmacy fails to control the source, time of collecting, portion of the plant used, mode of preservation, mode, manner, age, and strength of the preparation used in the case of the digitalis; or the quality and proportion of materials, mode of preparation, and mode of preservation of the mercury with chalk. If there be uncertainty, or want of due uniformity in these agents, the whole chain of effects and results which follow in dependence upon them may be rational enough as a train of inductive reasoning, but from being based upon a varying and uncertain starting-point, can have no, or but little, general or accumulative value, and the observations must begin again upon each new case, because low standards of pharmacy continually supply varying bases of observation. The sources of uncertainty in practical medicine from hidden causes, latent influences, and the various subtle and inscrutable modifications of the vital powers, are certainly

sufficient, and sufficiently beyond the control of the present state of science, to warrant those who devote themselves to the professions of medicine and pharmacy, in an earnest, joint, and harmonious action, to remedy this fruitful source of error and uncertainty; and to stem the currents which are drifting medicine and pharmacy—two branches of the same common stock—wider and wider apart, to wreck both upon the various forms of ismatic quackery.

Those in the profession of medicine who sneer and look downward upon pharmacy—and there are many such—who wrap their mental arms around themselves and say, "What a great, what a scientific man I am; how can I associate with a mere apothecary; I deal with Latin books and human life, he with castor-oil and sixpences; I am the master, he my servant, to execute my commands; I can have nothing in common with him upon any terms of equality or respect,"—make a great and fatal mistake. These are they who stand most in need of an elevated tone and standard of medical education.

Those in the pharmaceutical profession—and they are not less numerous—who say, "I don't care for the doctors; their pretended science is all clap-trap; I can make more money from my 'Elixir of Garus,' 'Elixir of Bark,' 'Ferrated Tincture of Bark,' 'Diarrhoea Cordial,' 'Life Bitters,' or from my soda fountain and brandy syrups, or even off my hair and nail brushes, than I am ever likely to make off them—these also, as pharmacutists, make a mistake no less fatal to the true progress of medicine and pharmacy. But the misfortune is that these mistakes, in common with most forms of unscrupulous quackery, generally lead to a pecuniary advantage, and that when attempts are made to elevate the standard of education, or any other standard which interferes with or obstructs these direct roads to pecuniary gain, the attempts must be earnest, well sustained, and enduring, and more than all, must be made in that liberal spirit and tone which alone is well adapted to scientific research and improvement. Let those now entering, or about to enter the professions of medicine and pharmacy, adopt and preserve this liberal spirit, and let them take the profession of medicine as a whole—pharmacy and all. Let them be not only fostered and appreciated as an unit, but be taught and learned as such. Those in either profession whose sole object is money, may be safely allowed to pursue their chosen course so long as the honorable exceptions to their rule are so numerous, provided this latter class will earnestly lend the aid of their moral force and example carefully and steadfastly in the right direction only. As it is the rising generation in medical sciences, as well as in common life, upon whom so much of the tone and progress of the future depends, all must look with interest and solicitude to the education of the rising generation as the element of true and enduring progress. Tuition is offered to this rising generation, and the seed thus sown is commonly good, though insufficient. But it should be borne in mind that some of the seed indiscriminately sown must fall on barren soil, and much more on soil not properly prepared for healthful, vigorous germination. To make such sowing available in the future harvest, belongs to the owner of the soil. The schools, at present at least, can do little else than to supply and direct the means by which men make themselves more or less proficient; and as all true and honorable success in life

depends mainly upon the proficiency which men attain in their various avocations, the whole matter culminates at the single point—that in all ranks of science, as in common life, men owe their cultivation and progress mainly to themselves; and much less of this status to any given amount of natural capacity, than to honest industry in the pursuit of knowledge.

THE WEEK.

A CONTROVERSY is now in progress between the powers that be at the Quarantine station, which is a ludicrous triangular conflict to determine the question of supremacy over the desolated Marine Hospital grounds. As the daily papers have published the correspondence of the parties concerned, we hope that the controversy will tend to convince the public of the important fact that our Quarantine laws admit of such variable and conflicting interpretations that they must be recast and simplified. It appears that the present imbroglia commenced upon a question of jurisdiction and proprietorship—not of the premises as Quarantine grounds, which those premises long since ceased to be—but of the products and usage of the soil of that notable spot. The Commissioners of Emigration claim, what is certainly their right and duty as the trustees and custodians of that costly thirty-acre lot, that the products of that ground cannot legally be disposed of without their approval. We regret to see that a course has been pursued by the physicians which certainly cannot be sustained under the existing statutes. Not only is the Marine Hospital an obsolete institution—entirely unused, and utterly incapable of being re-opened under existing laws, but by no existing law or former precedent could either the physician of Marine Hospital or the Health Officer exercise such control as has recently been attempted. As we understand the questions in dispute, the Emigration Board have simply attended to their duty in forbidding trespass upon the products of the grounds. With the duties of the Medical Officers that honorable Board has not interfered. If the controversy is to be protracted, let the public be informed that its objects have no reference to the protection of the public health. It is time that the public as well as our profession were fully awake to the importance of a thorough reform of the Sanitary system of the city and port of New York. Never was there a better time for effecting a reformation of the external health laws than the present—while an honest man like DR. GUNN is Health Officer. And notwithstanding the tricks of partisan hucksters who will continue to bolster up the existing system, the profession will look to DR. GUNN for a bold and manly advocacy of a thorough reconstruction and simplification of Quarantine laws. Until such a reform is effected, the “irrepressible conflict” of partisan and personal interests against the interests of the public will be continued. It is fortunate that for once the “war at Quarantine” has not resulted in burning and pillage. But the people may now justly protest against a system of management which is so complicated that “the three powers” are brought into inevitable collision on the simple question of jurisdiction of the garden sauce, in the legal protection of which, gate-keeper Doyle, a favorite old soldier of Gen. Scott, was incontinently thrust into prison on the Sabbath day.

Information Supplementary to the Students' Number.

SCHOOLS OF PHARMACY.

PHILADELPHIA COLLEGE OF PHARMACY.

FORTIETH SESSION, 1860-61.—The lectures in this institution will commence on Monday, October 1st, and terminate about the 1st of March.

QUALIFICATIONS FOR GRADUATION.—Every person upon whom a diploma of this college shall be conferred, must be of good moral character, must have arrived at the age of twenty-one years, have attended two courses of each of the lectures delivered in the college, or one course in the college, and one course in some other respectable college of pharmacy; *or when there is no such college organized in his locality, in some other respectable [medical] institution in which the same branches are taught*; and have served out an apprenticeship of at least four years, with a person or persons qualified to conduct the Drug or the Apothecary business; *at least three years and three months of which must have expired before the examination*—of which circumstance he must produce sufficient evidence to the Board of Examiners. He shall also be required to produce an original dissertation, or thesis, upon some subject of the materia medica, pharmacy, chemistry, or one of the branches of science immediately connected therewith, which shall be written with neatness and accuracy. The thesis, with the evidence of apprenticeship and diploma fee, shall be deposited with the senior professor of the school, on or before the 20th of February, of the session in which the application shall be made. He must also be recommended in writing by the committee of examination and the professors jointly, and if his application be finally approved of by the board of trustees, he shall receive the diploma of the college.

The regular examination for the degree shall take place in March previous to the meeting of the board of trustees. A second examination will be held when required, in the month of June, of which those students, who may not have accomplished their term of service at the regular examination (and other qualified applicants) may avail themselves.

Students who have previously matriculated, and all who are apprenticed to members of the college, are exempt from the matriculation fee, but they must invariably obtain the matriculation ticket before the commencement of each course. Graduates and members of the college, and all students who have paid for two full courses of instruction in the college, are admitted to the lectures gratuitously.

FEES.—Matriculation fee (paid but once to the Secretary), \$2; fee payable to each of the Professors, \$8; Diploma fee, \$5.

NEW YORK COLLEGE OF PHARMACY.

The attention of students and of all others interested in the progress of Pharmaceutical science, is invited to the prospectus of the lectures to be delivered under the auspices of the New York College of Pharmacy, during the months of November to March next, inclusive.

The Chemical Lectures will be given as hitherto by Prof. R. O. Doremus (17th of Oct.), whose name is a sufficient guarantee for a thorough course of instruction.

The course on Materia Medica, Botany, and Practical Pharmacy will continue in the hands of Prof. G. E. Thurber, whose lectures during the three past seasons have given such unqualified satisfaction to large classes.

FEES.—For either Course separately, \$10; for the two Courses, \$15; Diploma fee, \$5.

MARYLAND COLLEGE OF PHARMACY.

Lewis H. Steiner, M.D., Chemistry; Francis Donaldson, M.D., Materia Medica; Israel J. Graham, Pharmacy.

The third annual Course (1858-9) of Lectures will commence Oct. 20, and terminate March 1.

GRADUATION.—Attendance upon two full Courses of Lectures in a respectable College of Pharmacy, the last of which shall be in this College; good moral character; the age of twenty-one years; the apprenticeship of four years to the drug and apothecary business; the presentation of an original thesis on some subject connected with the branches taught here, and the passing of an examination before the Faculty and Committee of Trustees.

FEES.—For each Professor's Ticket, \$8; Matriculation Ticket (paid but once), \$2; Graduation, \$8.

CHICAGO COLLEGE OF PHARMACY.

James V. Z. Blaney, M.D., Chemistry; F. Scammon, M.D., Pharmacy; John H. Rauch, M.D., Materia Medica.

The annual Course of Lectures will commence Wednesday evening, Nov. 9, and continue twenty weeks. The lectures will be delivered on Monday, Wednesday, and Friday evenings.

GRADUATION.—Each candidate must be of good moral character; must have attended two full courses of lectures on the branches taught here, the last of which must be in this College; must serve four years in the drug or apothecary business (three years and three months of which must have elapsed prior to examination); must produce an original thesis on some subject of the Materia Medica, Pharmacy, or Chemistry, or of an allied branch of science; and must pass an examination before the Professors and a Committee of the Trustees.

FEES.—Matriculation fee, paid but once to the Treasurer, \$2; fee payable to each of the Professors, \$6; Diploma fee, payable to the Treasurer, \$5. The Matriculation fee will not be collected from the assistants of the members of this College.

INSTITUTIONS

IN WHICH

CLINICAL INSTRUCTION IS GIVEN, AND THE MEDICAL COLLEGES WHICH HAVE ACCESS TO THEM.

AUGUSTA, GA.

MEDICAL COLLEGE OF GEORGIA.

JACKSON STREET HOSPITAL AND SURGICAL INFIRMARY.—This Institution is an establishment for the *Treatment of Surgical and Chronic Diseases*, and for the accommodation of Negro Patients, during and after surgical operations. From the relations of the medical officers to the Medical College of Georgia, a deep interest is felt in its Classes, and they have therefore established, with the approbation of the faculty, a Surgical and Medical Clinic, and when consistent with propriety, and the interests of the patient, will afford Students the opportunity of attending lectures in the commodious Lecture Room connected with the building, and of seeing the operations performed here during the winter.

BALTIMORE, MD.

UNIVERSITY OF MARYLAND, BALTIMORE.

CLINICAL INSTRUCTION.—The Baltimore Infirmary, containing one hundred and fifty beds, is under the *immediate control* of the Faculty, and daily instruction is given at the bedside by the Professors of Surgery and of the Principles and Practice of Medicine. A limited number of Students will be permitted to reside in the Institution, as Clinical Assistants, and no candidate can receive his degree unless he produce evidence of his regular attendance at the Hospital.

BOSTON, MASS.

MASS. MEDICAL COLLEGE.
MASS. GENERAL HOSPITAL.

BUFFALO, N. Y.

BUFFALO MEDICAL COLLEGE.
BUFFALO HOSPITAL, SISTERS OF CHARITY.

CHARLESTON, S. C.

CHARLESTON MEDICAL COLLEGE.

ROPER HOSPITAL.—The Hospital is open to patients of both sexes. Operations are performed there in the presence of the students. Clinical lectures are delivered twice a week; and students are allowed to visit the hospital every day during the morning visit of the physician, on the payment of the Hospital fee. The history of every case, its symptoms, diagnosis, treatment and daily progress from the time of admission, are recorded in a book kept for the purpose in a place conveniently accessible. In short, every effort is made to assist the student in acquiring a practical knowledge of his profession. Obstetrical cases are furnished the students, when this can be done with propriety, under the immediate direction of the Surgeon of the Institution. At a meeting of the Faculty, held on the 21st of April, it was resolved, that it be made obligatory upon candidates for graduation to present tickets of attendance on the Roper Hospital during one term, they being charged according to the rates established by the Board, viz for six months, five dollars, and for twelve months, ten dollars, and this arrangement to continue in operation one year or more at the pleasure of the Faculty.

MARINE HOSPITAL.—The plan of instruction pursued by the physician is as follows:—The general principles of Pathology, medical and surgical, and of therapeutics, are dwelt upon; and their application to individual cases pointed out. The examination of patients is conducted very carefully, organ after organ being interrogated, and the results summed up and presented to the students, who are requested to determine the nature, seat, etc., of the disease. The nature of the disease, its extent, etc., ascertained, the indications of treatment are pointed out, and the means by which they are to be fulfilled, explained. The proper choice of remedial agents, being a matter of great consideration, is enforced.

WARD IN THE ROPER HOSPITAL.—The Faculty, with a view of extending the opportunities already possessed, have a certain number of beds in the adjoining Roper Hospital, for the reception of patients requiring surgical assistance. By the conveniences they have been able to furnish for the reception of patients, a valuable addition has been made to the surgical practice of the city. The operations are performed before the class, and they have opportunities of being made familiar with the subsequent treatment.

CHICAGO, ILL.

RUSH MEDICAL COLLEGE.
MED. DEPT. LIND UNIV.

MERCY HOSPITAL.—“During the year ending August 1, 1860, there were admitted into the Hospital of the Sisters of Mercy, 282 patients; of whom 204 were admitted into the medical wards, and 78 into the surgical. The Hospital is under the charge of Prof. E. Andrews, in the Surgical department, and Prof. N. Davis, in the medical. During the lecture season of the Medical Colleges of this city, clinical instruction is given in the wards of the Hospital from eight to nine o'clock every week-day morning, and three mornings per week all the rest of the year; thus constituting it a continuous school of practical instruction. The price of tickets for admission to the clinical instruction is \$6, and the ticket is good for the whole year. Patients are received and treated, both in the medical and surgical wards, from any part of the country, on the payment of from \$3 to \$5 per week for their board, according to the ward they occupy.

THE CITY HOSPITAL.—This is the general hospital of the city. Its wards contain a great variety of Medical and Surgical diseases, including many arising from accidents.

It is well constructed, with all the modern improvements, and affords every facility for Clinical study and observation. The medical and surgical departments will be under the care of Drs. Ross and Amerman respectively.

THE CITY DISPENSARY, in the North Division of Chicago, and the City Hospital Dispensary, are Institutions for the poor. A very large number of patients, especially women and children, are treated annually at these institutions, affording the student an extensive field for the observation of all diseases peculiar to this class of patients.

THE CHICAGO CHARITABLE EYE AND EAR INFIRMARY.—This Institution has been in successful operation for nearly two years. One hundred and fifteen patients were treated by the surgeons last year, and one hundred and twenty-six during the first seven months of the present year. The Infirmary affords the best opportunities in the city for Clinical instruction in diseases of the Eye and Ear, as also in the use of the ophthalmoscope and auriscope.

BOARD OF SURGEONS.—*Consulting Surgeons*.—Prof. Daniel Brainard, M.D. Prof. Joseph W. Freer, M.D. *Attending Surgeons*.—Edward L. Holmes, M.D., Wm. H. Baltzell, M.D.

LOUISVILLE, KY.

UNIV. HOSPITAL, Medical Department.

CITY HOSPITAL.—Clinical Lectures are given twice a week.

NASHVILLE, TENN.

UNIV., NASHVILLE, Medical Department.

TENNESSEE STATE HOSPITAL.

SHELBY MEDICAL COLLEGE.

SHELBY COLLEGE CLINICAL INFIRMARY AND CITY HOSPITAL.

MEDICAL OFFICERS.—*Surgeons*: Thomas L. Maddin, M.D., Daniel B. Cliffe, M.D.

Visiting Physicians: Daniel F. Wright, M.D.; John H. Callender, M.D.; J. J. Abernathy, M.D.; John P. Ford, M.D.; H. M. Compton, M.D.

The commodious residence of the late Henry Hill, erected with a view to secure the largest amount of comfort and ventilation, has, by extensive additions, been fitted up for Hospital purposes, in immediate contiguity with the buildings of Shelby Medical College. By contract with the corporation of Nashville, this institution accommodates all the indigent sick of the city; also, by contract with the Collector of the port of Nashville, it receives all the marine patients of that port. Besides this, the officers in charge of it have made arrangements for the accommodation of any number of private patients, whether under their own treatment or that of other physicians.

NEW ORLEANS, LA.

UNIVERSITY OF LOUISIANA.

NEW ORLEANS MEDICAL SCHOOL.

CHARITY HOSPITAL.—This is one of the largest hospitals in the world, and is open to students at all hours.

NEW YORK.

COLLEGE OF PHYSICIANS AND SURGEONS.

UNIVERSITY MEDICAL COLLEGE.

NEW YORK MEDICAL COLLEGE.

NEW YORK HOSPITAL.

Surgeons.—Gurdon Buck, M.D.; John Watson, M.D.; Thaddeus M. Halsted, M.D.; Thomas M. Markoe, M.D.; Willard Parker, M.D.; Geo. A. Peters, M.D.

Physicians.—Joseph M. Smith, M.D.; Henry D. Bulkley, M.D.; John H. Griscom, M.D.; Thomas F. Cock, M.D.

The Hospital buildings in the city consist of three separate large stone edifices, which can contain, together, above four hundred patients without any crowding, and are capable of being made able to accommodate about five hundred.

The whole number of persons who received the benefits of the New York Hospital, as medical or surgical patients, during the year 1859, was 2,816. Of this number there

have been cured, 1,771; Relieved, 269; Discharged at their own request, 140; Discharged as improper objects, 13; Died, 315.

Of the cases under Hospital treatment in 1859, 1825 were surgical, and 991 medical—being nearly one-half more surgical than medical cases. Of the 1825 surgical cases of the last year, 1035 were from fractures, serious contusions, burns, and other injuries arising from sudden casualties.

The report for 1859 states that the New York Hospital continues, as it has done for more than sixty years, to assist the great objects of medical science and instruction, by giving facilities for attendance on its practice to the students of the several medical schools in this city, and also to graduated physicians from other parts of the State, many of whom avail themselves of the improvement in practice afforded by observation of the variety and severity of disease in a large Hospital. The library, confined to medical learning and chemistry, natural history, and other sciences immediately connected with or bearing upon the healing art, is open to the same class of medical inquirers. It is managed by a joint committee from the Governors and the Physicians and Surgeons of the Institution. It is now rich in its special department, and contains above 6,000 volumes, to which new medical and scientific publications of reputation are added, as far as the means devoted to this object will allow.

Above twenty years ago, the formation of a Pathological Cabinet was begun. It was formed from the remarkable cases of morbid anatomy which occurred in the practice of the Hospital, and it has increased regularly and rapidly in extent, variety, and value, for the purposes of science and professional instruction. It is under the immediate care of a curator, and the several physicians who have successively filled that place have each of them left memorials of skill and fidelity. It has also received additions from other sources than the Hospital practice; and being now well arranged in a spacious and commodious out-building, it is consulted with great advantage.

BELLEVUE HOSPITAL.

FOOT 26TH STREET, EAST RIVER.—ADMISSION TO MATRICULATED STUDENTS FREE OF CHARGE.

Consulting Physicians.—John W. Francis, M.D.; Isaac Wood, M.D.

Consulting Surgeons.—Valentine Mott, M.D.; Alexander H. Stevens, M.D.

Visiting Physicians.—Alonzo Clark, M.D.; Benj. W. McCready, M.D.; Isaac E. Taylor, M.D.; George T. Elliot, M.D.; B. Fordyce Barker, M.D.; Alfred L. Loomis, M.D.; John W. Green, M.D.; Theodore G. Thomas, M.D.

Visiting Surgeons.—James R. Wood, M.D.; Lewis A. Sayre, M.D.; John J. Crane, M.D.; Stephen Smith, M.D.; Willard Parker, M.D.; Alexander B. Mott, M.D.; Carl Theo. Meier, M.D.; John W. S. Gouley, M.D.; William H. Church, M.D.

The resident Staff of Physicians and Surgeons is composed of twenty-one young medical men. The selection of these officers by first advertising the existence of vacancies in the resident staff, and then allowing a free competition of candidates before an Examining Committee, has secured to the hospital the best talent in the medical schools.

Number of patients admitted from January 1st to December 31st, 1859, 8,801; born, 388; total for the year, 10,042. Number of patients discharged from January 1st to December 31st, 1859, 8,067; died, 942; total, 9,009.

LYING-IN DEPARTMENT.—Number of births, 388; still-born, 38; per cent. of still births, 9 $\frac{7}{8}$; deaths from puerperal fever, 26.

Clinical instruction is given in this hospital daily at half-past one o'clock P.M. In the last annual report the Medical Board states: The hospital continues to be a favorite resort for students of medicine, and at present the number in daily attendance upon clinical instruction is larger than at

any former period. It is gratifying to the Medical Board to acknowledge the interest which your Board has manifested in the effort to make this hospital subservient to the great cause of sound and scientific medical instruction. And we may confidently anticipate, that as from year to year the vast advantages this institution affords for instruction in every department of medicine are gradually developed and made available to the student, these classes will increase, until Bellevue shall become a great centre of Medical Education.

NEW YORK EYE INFIRMARY.

Consulting Surgeons.—Edward Delafield, M.D.; George Wilkes, M.D.

Surgeons.—Abram Dubois, M.D.; Gurdon Buck, M.D.; Thaddeus M. Halsted, M.D.; C. R. Agnew, M.D.

Assistant Surgeons.—John H. Hinton, M.D.; F. J. Bumstead, M.D.; Henry D. Noyes, M.D.

During the past year, four thousand four hundred and seventy-eight patients, suffering from various diseases of the Eye and Ear, have been prescribed for at the Infirmary. Patients with diseases of the Eye, 4,171; Ear, 307; Total, 4,478.

CLINICAL INSTRUCTION.—The Report for 1859 says: In this connexion the Infirmary is steadily laboring to extend its benefits to students and practitioners of medicine. Clinical teaching is regularly given at the institution, courses of lectures are held, and publications made in the medical journals of cases which add to the general stock of knowledge. The importance of this department of the labors of the Infirmary cannot be overestimated: it is helping to qualify others to minister in the same way. Students of medicine here have opportunities of seeing and understanding diseases of the eye ten times greater than they could obtain in years of private practice. The whole community, the rich as well as the poor, enjoy the benefit of this instruction; for those who will be medical practitioners throughout the country are thus endowed with knowledge by which they may preserve or confer sight upon the poor not only, but bring the same boon to the affluent. The latter are deeply interested to protect themselves against the evils of mistakes or unskilfulness on the part of those who may become their own medical advisers.

NEW YORK OPHTHALMIC HOSPITAL.

NO. 63 THIRD AVENUE.

Consulting Surgeons.—Valentine Mott, M.D., LL.D.; David L. Rogers, M.D.

Attending Surgeons.—Dr. Mark Stephenson, Dr. John P. Garrish, Dr. Marcus P. Stephenson.

From the report of the Surgeons for 1858-59 we learn that: since the last published report in 1858, there have been entered upon the Register and treated at the Hospital *eighteen hundred and sixty-nine* patients, who, together with the sixty-five remaining under treatment at that time, make the total number from January 1st, 1858, to January 1st, 1860, *nineteen hundred and thirty-four*, nine hundred and twenty-three of whom were attended during the year 1858, and the remaining ten hundred and eleven during the year 1859, making the whole number of patients treated at the Hospital since its organization in 1852, to January 1st, 1860, seven thousand six hundred and sixteen. The *Ophthalmic School* connected with the Hospital—the only one in America—was organized at the foundation of the Institution, and is in a very flourishing condition. A regular course of Lectures, Cliniques, and Examinations, are given every year from the middle of October to the first of March.

COURSE OF INSTRUCTION.—Lectures on *Ophthalmic Medicine and Operative Surgery*, every Saturday at half-past three o'clock p.m., during the winter session, by Mark Stephenson, M.D. Also, *Clinical Instruction*, by Drs. Stephenson and Garrish, on Tuesday, Thursday, and Saturday, from half-past one to half-past three p.m. An examination with

an engraved testimonial of the course of studies, will be given at the end of the term, signed by the Surgeons and Officers of the Institution. Tickets \$5 50—the avails given to the building fund. Members of the class will be furnished with Dr. Stephenson's Essay on Cataract, also with the Syllabus of his course of Lectures on the Eye, without any extra charge.

PHILADELPHIA.

UNIVERSITY OF PENNSYLVANIA.

JEFFERSON MEDICAL COLLEGE.

PENNSYLVANIA MEDICAL COLLEGE.

PENNSYLVANIA HOSPITAL.

Physicians.—W. W. Gerhard, M.D.; J. J. Levick, M.D.; J. F. Meigs, M.D.; J. G. Smith, M.D.

Surgeons.—G. W. Norris, M.D.; E. Peace, M.D.; Jos. Pancoast, M.D.; E. Hartshorne, M.D.

The Physicians give Clinical Lectures in the lecture-room of the Hospital at 10 o'clock, a.m., on each Wednesday and Saturday of their term of service, and the Surgeons give Clinical Lectures on Surgery at 11 o'clock on the same days during their term of service. During the summer months, besides the bi-weekly clinics, *daily visits* are made with a limited number of pupils to the surgical and medical wards, an additional opportunity being thus afforded the student to familiarize himself with the diagnosis and treatment of disease. This hospital possesses a large medical library, the collection amounting to about 11,000 volumes. It was founded, and is supported, by the fees derived from students' tickets.

FEES.—A fee of \$10 entitles the student to the privileges of the Hospital for a year, including the use of the Library, under certain restrictions.

PHILADELPHIA HOSPITAL.

Physicians.—J. L. Ludlow, M.D.; J. M. Da Costa, M.D.; C. P. Tutt, M.D.; O. Judson, M.D.

Surgeons.—D. H. Agnew, M.D.; S. D. Gross, M.D.; R. S. Kenderdine, M.D.; R. J. Levis, M.D.

This is one of the most extensive institutions of the kind in the United States, having large buildings for the accommodation of the sick and insane.

It is divided into male and female wards; the former being again divided into surgical, medical, venereal, and clinical. The latter into the same, with the addition of obstetrical, nursery, and asylum for children. Here may be seen every variety of malady to which the human frame is liable. During the winter and the lecture season, students are admitted to the public clinics. It is easily reached by means of the Market or Chestnut street Passenger Railways, or by omnibus.

This institution is managed by the Guardians of the Poor, a board of twelve men, who receive their appointment from the courts and the City Councils, and its chief support is derived from the Poor Tax of the city. The Medical Board consists of four visiting physicians, four visiting surgeons, and four visiting obstetricians, with eight assistants or "internes." The latter are selected according to merit from candidates who present themselves before the Medical Board for examination. These appointments are generally made early in April.

EPISCOPAL HOSPITAL.

Physicians.—J. C. Morris, M.D.; H. Hartshorne, M.D.; J. Da Costa, M.D.; Wm. Mayburry, M.D.

Surgeons.—Wm. Hunt, M.D.; H. E. Drayton, M.D.; R. S. Kenderdine, M.D.; R. P. Thomas, M.D.

Founded by members of the Episcopal Church, but open to the sick of every country, creed, or color. Opened for the reception of patients in December, 1853. Has accommodations for thirty patients. The number of patients treated in the wards during 1857 was 388, the average daily number having been thirty. In addition to these, 2,136 out-patients were treated.

WILLS'S HOSPITAL.

FOR DISEASES OF THE EYE AND LIMBS.

Physicians.—J. J. Levick, M.D.; J. J. Reese, M.D.; S. L. Hollingsworth, M.D.

Surgeons.—S. Littell, M.D.; Wm. Hunt, M.D.; A. Hewson, M.D.; T. G. Morton, M.D.

Founded by the late James Wills, and opened for occupation March 1st, 1834. Devoted to the treatment of curable diseases of the eyes, and of such curable diseases of the limbs as involve lameness. From 1,500 to 2,000 patients are treated in the course of the year, and there is an average of from thirty to fifty inmates. *Clinical Days*—Mondays and Fridays.

HOWARD HOSPITAL.

This Institution was chartered in 1854, and now contains fifty beds. It has a board of ten physicians, each of whom devotes himself to a special branch of Medicine and Surgery. Clinics are held on each day, at specified hours. Accident cases are admitted if brought immediately after to the Infirmary; curable and incurable cases, which are able to pay their board; such poor as may be deemed worthy objects of charity. Since its organization to the present time (1858), 9,019 patients have been treated here, over 2,000 of which belong to the last year.

This Institution is supported by subscriptions and donations. Two Resident Physicians are always present to attend to cases and applications.

PHILADELPHIA LYING-IN CHARITY.

LOCATION—931 Race Street.

Physicians.—E. Wilson, M.D.; J. M. Corse, M.D.

Four practical courses in Obstetrics are given each year, by the attending physicians. Each course continues about eleven weeks, and includes fifty lessons on the great principles of Obstetric Science, and the practical details of the art, and these, when the pupil is prepared by manipulations on the manikin, are verified by opportunities of observing cases. The members of each class have in rotation the patients of the PHILADELPHIA DISPENSARY, PHILADELPHIA LYING-IN CHARITY and PHILADELPHIA NURSE SOCIETY, assigned them for their care and attendance, with the aid of the Assistants, if necessary, and under the supervision of the Principals. In addition to the Obstetric course, a Clinic will be held every Saturday, at 9 o'clock A.M., for the treatment of Diseases of Women.

FEES.—Fee for the Obstetric Course, \$15; Fee for Clinical Course, \$10.

PHILADELPHIA DISPENSARY.

LOCATION—Fifth Street, below Chestnut.

Consulting Physicians and Surgeons.—Drs. William Darrach, H. L. Hodge, G. W. Norris, and W. W. Gerhard.

Obstetric Physicians.—Drs. E. Wilson, J. M. Corse.

It is the oldest Dispensary in Philadelphia, having been instituted April 12th, 1786. During the year 1858, 9,740 patients were treated, and there were 490 in the obstetric department. There were 35,126 prescriptions compounded.

NORTHERN DISPENSARY.

LOCATION—No. 106 Spring Garden Street.

Consulting Surgeons.—Drs. P. B. Goddard, D. Gilbert, R. P. Thomas; and H. H. Smith.

Consulting Physicians.—Drs. S. Jackson, L. Curtis, M. M. Levis, J. R. Bryan, and W. Maybury.

Consulting Physicians to the Lying-in Department.—Drs. H. L. Hodge, Hatfield, C. D. Meigs, J. H. Smalty, and J. Rhein.

Instituted October 1st, 1816. This Dispensary affords an excellent opportunity for the study of pharmacy and minor

surgery. During the year ending December 31st, 1857, 6,973 patients were admitted to the care of the Dispensary, and 12,600 prescriptions compounded; and in the Lying-in Department 41 patients were attended.

THE GERMAN DISPENSARY.

Noble Street, below Fourth.

The Attending Physicians are Drs. Tiedeman, Beeken, Rattenman, Schrotz, and Fischer.

The object of the Institution is to give medical attendance to the German portion of the population, particularly to those who are not sufficiently acquainted with the English language, to make themselves understood by the Physicians of other Dispensaries. The German Dispensary is supported by voluntary contributions, and is deserving of the sympathy and liberality of our citizens. Since its opening *three thousand* cases have been treated.

SAVANNAH, GA.

SAVANNAH MEDICAL COLLEGE.

OGLETHORPE MEDICAL COLLEGE.

SAVANNAH HOSPITAL.—Clinical Instruction given twice a week.

ST. LOUIS, MO.

ST. LOUIS MEDICAL COLLEGE.

MISSOURI MEDICAL COLLEGE.

The St. Louis HOSPITAL, on account of its central and convenient location, is the receptacle of most of the cases of severe recent injury. It is under the exclusive control of the Faculty of the St. Louis Medical College during the whole year. The entire forenoons of Wednesdays and Saturdays are devoted exclusively to clinical exercises in both medicine and surgery, by the whole class, either in this or in some one of the hospitals. Thus the page of disease is continually exhibited to the student, to be read by him in all its phases; semeiology and therapeutics go hand in hand, and pathology and the action of medicines are taught by practical living illustrations. An extensive addition has been erected, which makes the building thrice its former size; and a still further addition is now in progress of erection through the liberal bequest of the late John Thornton, Esq.

CITY HOSPITAL.—This large and magnificent hospital is easy of access, and always well filled with patients. In its re-arrangement care has been taken to introduce all the modern improvements, which render it very convenient and available for hospital and clinical purposes. During the whole term of lectures, some one of the Faculty will be in attendance upon either the medical or surgical department. Clinical lectures are here delivered by the professor of clinical medicine or surgery, during the preliminary as well as the regular course. The number of patients admitted during the past year amounted to four thousand.

UNITED STATES MARINE HOSPITAL.—This Institution, erected by the general government, is situated in South St. Louis, and is devoted to the reception of sick and disabled boatmen. As St. Louis is already the third city in the Union in steamboat tonnage, it will be readily perceived how large a number of cases find their way into this excellent charity. It is under the care of Dr. McPheeters, who holds the post of physician and surgeon to the Institution. Here, as well as in the two preceding hospitals, students are admitted free of charge. It is easily reached by a street railroad.

THE ST. LOUIS LYING-IN HOSPITAL.—A large and appropriate structure has been erected on the southeast corner of Tenth and O'Fallon streets. The physician in charge is Dr. L. Charles Boislaniere, who will be glad to extend its practical benefits to all students upon the payment of a small fee. Professor Pallen is the Consulting Physician.

THE O'FALLON CLINIC AND DISPENSARY.—This establishment occupies a building adjoining the lecture room of the College,

LEADING STATISTICS OF THE FIVE DISPENSARIES OF NEW YORK.
STATISTICS FOR THE YEAR 1859.

Name of Dispensary, and Date of its Incorporation.	SEXES OF THE PATIENTS.		Grand Total for each Dispensary.	PATIENTS WHERE TREATED.		VACCINATION.			AGES.		NATIVITY OF THE PATIENTS.		PARTIAL RESULTS.		PRESCRIPTIONS, THEIR NUMBER AND AVERAGE.		FINANCIAL.		GENERAL STATISTICS.				
	Males.	Females.		At the Dispensary.	At their Dwellings.	Number of Primary Vaccinations.	Number of Re-Vaccina- tions.	Whole Number Vaccinated.	Adults.	Children under 15 years of age.	Of American Birth.	Of Foreign Birth.	No. sent to Hospital.	No. of Deaths.	Number of Prescrip- tions Dispensed.	Av. Number of Prescrip- tions to each Patient.	Total Amount of Expen- ditures for the Year.	Average Cost of the Whole Ser- vice to each Patient.	No. of Years since the Organization of each Dispensary.	No. of Persons Vacci- nated by each Dispens- ary since its Organi- zation.	No. of the Sick Poor, &c., served by each Dispens- ary since its Organi- zation.	Expenditures of each Dispensary from its Organization to Dec. 31st, 1859.	Average Cost of the Whole Service to each Patient from the beginning.
New York..... A.D., 1791	15,817	25,228	43,589	37,140	6,399	1,597	20	1,667	25,225	18,014	19,355	24,181	5,428	272	102,951	2.45	\$5,708 30	18.1 cts.	69	105,529	1,046,404	\$170,751 30	16.32 cts.
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NEW YORK DISPENSARY

(COR. WHITE AND CENTRE STREETS).

Daily attendance from 9 A.M. until 2 P.M.

GODFREY AIGNER, M.D., *House Physician.*THEODORE F. HARDENBURGH, M.D., *Asst. House Physician.*

Attending Physicians.—C. K. Briddon, M.D.; S. W. Dana, M.D.; O. O. Burgess, M.D.; R. P. Gibson, M.D.; — Corning, M.D.; — Van Norden, M.D.; R. Wilson, M.D.; C. Cameron, M.D.; and Geo. F. Shrady, M.D.

NORTHERN DISPENSARY

(COR. CHRISTOPHER ST. AND WAVERLEY PLACE).

Daily attendance from 9 A.M. until 2 P.M.

E. B. WARNER, M.D., *House Physician.*

Attending Physicians.—P. J. Clarke, M.D.; J. O'Rourke, M.D.; W. M. Hudson, M.D.; Foster Swift, M.D.; P. K. Keirnan, M.D.; C. V. A. Anderson, M.D.; Robt. Stone, M.D.; A. H. Rogers, M.D.; Henry Slack, M.D.; H. D. Burlingham, M.D.; H. W. Holmes, M.D.; F. A. Burrall, M.D.; T. B. Dash, M.D.; J. W. Purdy, M.D.; S. B. W. McLeod, M.D.; E. S. Hoffman, M.D.; and E. Denison, M.D.

EASTERN DISPENSARY

(COR. GRAND AND ESSEX STREETS).

Daily attendance from 10 A.M. until 4 P.M.

JONAS P. LOINES, M.D., *House Physician.*

Attending Physicians.—A. Murray, M.D.; J. B. Wyckoff, M.D.; E. S. Smith, M.D.; A. B. Wilkinson, M.D.; John Bell, M.D.; Wm. R. Robinson, M.D.; E. F. Parsons, M.D.; Cuno Dix, M.D.; H. Deiffenbach, M.D.; E. M. Decy, M.D.; H. J. Harrison, M.D.; R. B. Wilson, M.D.; G. L. Underwood, M.D.; Wm. C. Corson, M.D.; and Julius Frankel, M.D.

NORTH-WESTERN DISPENSARY

(NO. 511 8TH AVENUE).

Daily attendance from 9 A.M. until 3 P.M.

J. HENRY WATTS, M.D., *House Physician.*

Attending Physicians.—P. C. Cole, M.D.; J. P. Smith, M.D.; H. Keese, M.D.; Geo. W. McCune, M.D.; J. Mesinger, M.D.; J. B. Thompson, M.D.; E. B. Thompson, M.D.; M. G. Porter, M.D.; Wm. H. Holmes, M.D.; J. Ross, M.D.; and G. A. Hurlbut, M.D.

DEMILT DISPENSARY

(COR. 2D AVENUE AND 23D STREET).

Daily attendance from 9 A.M. until 4 P.M.

ISAAC CUMMINGS, M.D., *House Physician.*

Attending Physicians.—E. R. Peaselee, M.D.; F. S. Edwards, M.D.; G. P. Cammann, M.D.; J. R. Leaming, M.D.; D. S. Conant, M.D.; W. R. Donaghe, M.D.; T. G. Thomas, M.D.; C. V. A. Anderson, M.D.; Jaa. B. Reynolds, M.D.; — McDonald, M.D.; Govr. Smith, M.D.; J. Bird, M.D.

ARMY AND NAVY.

REGULATIONS FOR ADMISSION AND PROMOTION IN THE MEDICAL DEPARTMENT OF THE ARMY.

Boards of Medical Examiners are not convened at stated times, but whenever, in the opinion of the Surgeon-General and Secretary of War, the wants of the service render it necessary. Their meetings are usually held in New York or Philadelphia, which points have generally proved the most convenient for a majority of the applicants; but they may be, and have been, held in Richmond, Newport, Ky., St. Louis, and other places, at the option of the Secretary of War. These Boards are governed in their proceedings by the Regulations for the Army, so far as applicable, but establish their own *modes* of examination. It is the practice first to ascertain whether the candidate is subject to any infirmity or disease, mental or physical, which would in any way disqualify him for performing efficiently the active and arduous duties of a medical officer. If the result be satisfactory, the professional examination follows; if unsatisfactory, the candidate is furnished with a certificate of the fact. The professional examination embraces Anatomy and Physiology, Principles and Practice of Surgery, Obstetrics, Materia Medica and Therapeutics, Chemistry, Medical Jurisprudence and Toxicology. General literary and scientific acquirements are essential; but no positive standard or limit in that particular has been established.

"An Act of Congress, Approved June 30, 1834."

Sec. 1. That from and after the passing of this Act, no person shall receive the appointment of Assistant-Surgeon in the army of the United States, unless he shall have been examined and approved by the Army Medical Board, to consist of not less than three Surgeons or Assistant-Surgeons, who shall be designated for that purpose by the Secretary of War; and no person shall receive the appointment of Surgeon in the army of the United States, unless he shall have served, at least five years, as an Assistant-Surgeon, and unless, also, he shall have been examined by an Army Medical Board, constituted as aforesaid.

Sec. 2. That the Surgeons in the army of the United States shall be entitled to receive the pay and emoluments of a Major; and the Assistant-Surgeons, who shall have served five years, shall be entitled to receive the pay and emoluments of a Captain; and those who shall have served less than five years, the pay and emoluments of a First Lieutenant; and that said Assistant-Surgeons shall be entitled to receive the same allowance for forage as they are at present entitled to.

Sec. 3. That every Surgeon and Assistant-Surgeon, who shall have served faithfully ten years in these grades, respectively, shall be entitled to receive an increase of rations per day, equal to the number of rations to which he may be entitled under this Act.

No person can receive the appointment of Assistant-Surgeon in the army of the United States unless he shall have been examined and approved by an Army Medical Board, to consist of not less than three Surgeons or Assistant-Surgeons, to be designated for that purpose by the Secretary of War; nor can any person receive the appointment of Surgeon in the army of the United States unless he shall have served five years as an Assistant-Surgeon, and unless, also, he shall have been examined by an Army Medical Board, constituted as aforesaid.

Boards of Medical Examiners are convened at such times as the wants of the service render it necessary, when selections are made by the Secretary of War of the number of applicants to be examined for the appointment of Assistant-Surgeon. To the persons thus selected invitations are given to present themselves to the Board for examination. These invitations state the time and place of meeting of the Board.

Applicants must be between twenty-one and twenty-

five years of age. The Board will scrutinize rigidly the moral habits, professional acquirements, and physical qualifications of the candidates, and report favorably in no case admitting of a reasonable doubt.

The Board will report the respective merits of the candidates in several branches of the examination, and their relative merit from the whole; agreeably whereunto, if vacancies happen within two years thereafter, they will receive appointments and take rank in the Medical Corps.

An applicant failing at one examination may be allowed a second, after two years, but never a third.

Applications must be addressed to the Secretary of War; must state the residence of the applicant, and the date and place of his birth. They must also be accompanied (reference will receive no attention) by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the Medical Staff.

No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment; but those who are approved and receive appointments will be entitled to transportation on obeying their first order.

The pay and emoluments of Surgeons and Assistant-Surgeon are as follows:

Assistant-Surgeon under five years' service.—Pay per month, \$53 33; number of rations per day, 4; amount of rations per month, \$36; number of horses for which forage is allowed, 1; amount for forage per month, \$8. *Servants.*—Number for which pay is allowed, 1; amount allowed for pay per month, \$12; amount allowed for clothing per month, \$2 50; amount allowed for rations per month, \$9; total amount allowed per month, \$23 50; aggregate amount receivable, \$120 83.

Assistant-Surgeon, over five years' service.—Pay per month, \$70; number of rations per day, 4; amount of rations per month, \$36; number of horses for which forage is allowed, 1; amount for forage per month, \$8. *Servants.*—Number for which pay is allowed, 1; amount allowed for pay per month, \$12; amount allowed for clothing per month, \$2 50; amount allowed for rations per month, \$9; total amount allowed per month, \$23 50; aggregate amount receivable, \$137 50.

Assistant-Surgeon, over ten years' service.—Pay per month, \$70; number of rations per day, 8; amount of rations per month, \$72; number of horses for which forage is allowed, 1; amount for forage per month, \$8. *Servants.*—Number for which pay is allowed, 1; amount allowed for pay per month, \$12; amount allowed for clothing per month, \$2 50; amount allowed for rations per month, \$9; total amount allowed per month, \$23 50; aggregate amount receivable, \$173 50.

Surgeon, under ten years' service.—Pay per month, \$80; number of rations per day, 4; amount of rations per month, \$36; number of horses for which forage is allowed, 3; amount for forage per month, \$24. *Servants.*—Number for which pay is allowed, 2; amount allowed for pay per month, \$24; amount allowed for clothing per month, \$5; amount allowed for rations per month, \$18; total amount allowed per month, \$47; aggregate amount receivable, \$187.

Surgeon, over ten years' service.—Pay per month, \$80; number of rations per day, 8; amount of rations per month, 72; number of horses for which forage is allowed, 3; amount for forage per month, \$24. *Servants.*—Number for which pay is allowed, 2; amount allowed for pay per month, \$24; amount allowed for clothing per month, \$5; amount allowed for rations per month, \$18; total amount allowed per month, \$47; aggregate amount receivable, \$223.

The allowance for forage and servants is only paid to the Surgeons and Assistant-Surgeons when they actually employ and keep in service the number of servants and horses charged for.

In addition to the above, Surgeons and Assistant-Surgeons are allowed an additional ration per day after the termination of every five years' service.

REGULATIONS FOR ADMISSION AND PROMOTION IN THE MEDICAL DEPARTMENT OF THE NAVY.

It is prescribed by law that no person shall be appointed in this branch of the service who has not been examined and found qualified by a Board of Naval Surgeons, designated by the Secretary of the Navy.

A Board of Naval Surgeons will be assembled annually, at such place as may be indicated by the Department, usually about the close of the lecture season of the colleges, for the examination and selection of candidates for admission into the Medical Corps of the Navy, as well as for the examination of Assistant-Surgeons who may be candidates for promotion.

Application for permission to attend the examination for admission to the Medical Corps of the Navy must be addressed to the Secretary of the Navy, stating the age and residence of the applicant, and be accompanied by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible position of a Medical Officer of the Navy.

The application of no one will be considered who is under twenty-one or over twenty-five years of age.

The permission will state the time and place of the meeting of the Board.

The Board rigidly scrutinizes the physical qualifications of each candidate, as well as his moral, mental, and professional fitness for the naval service; and reports favorably upon no case admitting of a reasonable doubt, as the health and lives of the officers and men of the navy are objects too important to be intrusted to ignorant or incompetent persons.

The Board reports the relative merit of the candidates as shown by the examination; and appointments will be made in the navy as vacancies may occur, in the order in which they may be reported by the Board.

No qualified candidate will be held over for appointment beyond one year; if not appointed within that time, it will be necessary for the candidate to be re-examined, when he will take position with the class last examined.

Physical examination will precede the professional; no candidate, not physically qualified for the active duties of the service, will be examined professionally. The Board will make a separate report, in each case, of the physical condition, *direct* to the Department, to be placed on file with the testimonials of the candidate.

No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment.

After five years' service in the navy, at least two years of which shall have been passed "on board a public vessel of the United States at sea," Assistant-Surgeons shall be entitled to an examination for promotion.

In order that the relative position of Assistant-Surgeons of the same date, who shall be examined for promotion at different times, may be more readily determined, a majority of the members of the Board will be selected, if practicable, from those who served on the next preceding Board.

Assistant-Surgeons, who are candidates for promotion, shall present to the board testimonials of correct deportment and habits of industry from the Surgeons with whom they have been associated on duty; also, a journal of practice, or case-book, in their own handwriting. They are expected to be familiar with the details of duty specified in the "Instructions for the Government of Medical Officers."

Any Assistant-Surgeon who shall fail to present himself for examination after he has been ordered (unless for reasons which may be satisfactory to the Department), or who, after examination, shall be reported by the Board as "not qualified" for promotion, shall be dropped from the list of Officers of the navy.

The pay of Assistant-Surgeons and Surgeons is established by act of Congress, approved March 3, 1835, and is as follows:

Assistant-Surgeons.—Waiting orders, \$650; at sea, \$950; after passing and found qualified for promotion to Surgeon, \$850; at sea, \$1,200; when stationed at navy yards, hospitals, rendezvous, and receiving-ships, \$950; after being passed, and stationed as above, \$1,150.

Surgeons.—For the first five years after the date of his commission, \$1,000; for the second five years, \$1,250; for the third five years, \$1,400; for the fourth five years, \$1,600; after he shall have been commissioned as a Surgeon twenty years and upwards, \$1,800.

All Surgeons of the navy under orders for duty at navy yards, receiving vessels, rendezvous, or naval hospitals, shall have an increase of one-fourth of the foregoing amount of their respective annual pay, from the date of their acceptance of such orders.

All Surgeons of the navy ordered to any of the ships or vessels of the United States commissioned for sea service shall have an increase of one-third of the foregoing amount of their respective annual pay, from the date of their acceptance of such orders.

All Surgeons of the navy, ordered as Fleet Surgeons, shall have an increase of one-half of their respective annual pay, from the date of their acceptance of such orders.

In addition to the above, Surgeons and Assistant-Surgeons are allowed one ration per day when attached to vessels for sea service, and ten cents per mile for travelling expenses, if under orders of the Department.

SEC. 7 OF ACT OF AUG. 3, 1848.—*And be it further enacted,* that in calculating for the pay of Surgeons hereafter, the time upon the graduated scale of pay shall be reckoned from their original entry into the service.

PRIZES FOR 1861.

FOR THE MEDICAL PROFESSION.

AMERICAN MEDICAL ASSOCIATION.—Two prizes of \$100 each to the best two volunteer communications reported favorably by the Committee. Committee for 1860-61, Drs. DANIEL BRAINARD, Chicago, Ill.; D. L. MCGUGEN, Iowa; M. L. LITTEN, Mo.; JOHN EVANS, Ill.; A. L. McARTHUR, Ill. Papers must be sent to the Chairman before June, 1861.

BOYLSTON PRIZES.—Two, \$60 each, or a gold medal of that value. **SUBJECTS**—1. *Excision of Joints.* 2. *Diagnosis and Treatment of Chronic Pleurisy.* Papers must be sent to Dr. EDWARD REYNOLDS, Boston, on or before April 1, 1861.

FISKE FUND.—Two, \$100 each. **SUBJECTS**—1. *Aneurism: its Varieties and their appropriate Treatment.* 2. *Ozone: its Relations to Health and Disease.* Papers must be sent to Dr. S. A. ARNOLD, Providence, R. I., on or before May 1, 1861.

STEVENS PRIZE, OFFERED BY ALEXANDER H. STEVENS, M.D., LL.D.—This prize, consisting of the sum of One Hundred Dollars, will be awarded for the best series of Preparations which shall adequately illustrate the Anatomy, Physiology, and Pathology of the Larynx. The preparations should be sent in to Dr. HENRY B. SANDS, Curator of the College, on or before the 1st day of March, 1861. The preparations receiving the above prize, as well as those of which Honorable Mention may be made, will be deposited in the Museum of the College of Physicians and Surgeons, inscribed with the names of the successful competitors.

O'REILLY'S PRIZE TO MEDICAL STUDENTS.—A premium of \$250 for the Essay which shall be judged the best by competent judges on the Anatomy and Physiology of the Animal and Organic Nervous Systems. The Essays to be sent on or before the 1st of March, 1861, to Dr. JOHN O'REILLY, No. 230 Fourth Street, New York.

IMPORTANT INFORMATION CONNECTED WITH THE PRACTICE OF VACCINATION.

BY J. P. LOINES, M.D.

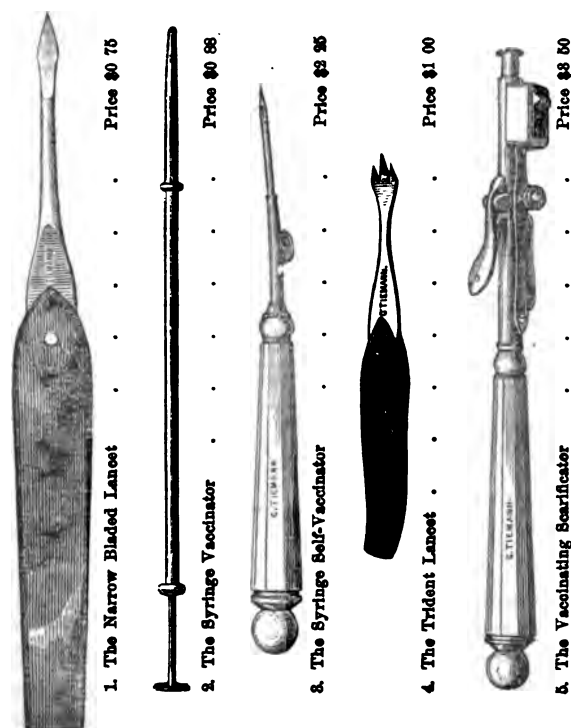
House Physician Eastern Dispensary.

FROM instances which have come to the knowledge of this Dispensary, that show a great want of information in various sections of the country, upon all branches of the subject of vaccination, it is induced to give a few instructions as to the best methods of using the several kinds of Vaccine, and a short description of the best instruments to be employed in vaccination, together with their prices and how they may be obtained. The subject may be most clearly presented in the form of divisions with appropriate titles.

I. The Method of Vaccination.

The rationale of vaccination is as follows, viz. Vaccine virus should be exposed to the absorbent vessels when they are in a proper state for absorption: to produce this state, or to open these vessels, that instrument which causes the least irritation, and the least flow of blood is by, far the best, as both the flow of blood and the irritation of the skin are likely to carry off the virus before it can be properly taken up; moreover, that which causes the least pain, other things being equal, is in all cases preferable.

*II. List of suitable Vaccinating Instruments.**



III. Description of the several Vaccinating Instruments and the proper method of using them.

1. **THE NARROW BLADED LANCET.**—This is a lancet of peculiar construction, somewhat resembling the common exploring needle, narrow, pointed, and sharp, convex on

* The two first instruments are shown in the engravings of their actual size, the remaining three are but two-thirds of it. We are able to present these illustrations by courtesy of the Trustees of the Eastern Dispensary.

one side of the cutting part of the blade, and plane on the other. This instrument may be used like the common lancet in introducing any kind of vaccine to the absorbents.

In employing dried lymph in vaccination, such as is usually supplied upon a section of a quill or a piece of ivory, proceed with the point of this lancet to pick out ten or twelve minute particles of cuticle from the arm, in a circle of not more than one third of an inch in diameter, so as to expose the true skin, and in the fluid which exudes therefrom dissolve and commingle the dried lymph by gentle friction over the punctured surface.

Many persons will acquire such dexterity with this instrument, that, by a single gentle push, with its convex side next to the skin, they will be able to lay over, as it were, a furrow of cuticle, and thus, with but little cutting and with scarcely any danger of puncturing too deeply, expose a comparatively large absorbent surface.

This instrument may also be advantageously used by those who do not possess the Syringe Self-Vaccinator (Fig. 3), to make a valvular incision under the skin, into which a minute piece of scab may be inserted by means of a needle, or a probe, or by means of what is better, the instrument to be next described.

2. **THE SYRINGE VACCINATOR.**—This consists of a cylinder of metal, three inches long, with a closely fitting piston, which, when pushed its whole length through, it projects an eighth of an inch from the cylinder itself. By means of this instrument, a small piece of the vaccine scab, or a small quantity of the same pulverised, or fluid lymph with which the cylinder is to be first charged, can be pushed into the valvular openings or cuts in the arm, previously made for it.

3. **THE SYRINGE SELF-VACCINATOR.**—In its uses this instrument presents a combination of the two previous instruments, and is sufficiently well explained in the descriptions already given of them, and by reference to the accompanying engraving. It is apparent that the open side should be introduced downwards, and that the push by which the scab is inserted, should be made very suddenly. In the handle of this instrument is a cavity to hold vaccine material, secured by a screw top.

4. **THE TRIDENT LANCET.**—This lancet is a labor-saving one, for introducing vaccine lymph, in either a fluid or a dried state, by the same process as that described for the Narrow Bladed Lancet (Fig. 1).

THE VACCINE SCARIFICATOR.—This is another labor-saving instrument, by the use of which five incisions are simultaneously made in the arm of the patient. It has the advantage of requiring neither skill nor steadiness of hand in its employment, while it makes the most imposing appearance of any instrument used in vaccination, in the eyes of the patient, or in those of the witness of the operation. Lymph is introduced into the incisions, drawn open or pressed apart by the fingers of the operator, in the same manner as is explained in describing the Narrow Bladed Lancet (Fig. 1). A skilful person, in using any of these vaccinating instruments, need not, generally, cause sufficient pain to awaken a sleeping infant. It is proper to mention in this connexion, that the best part of the surface of the body for vaccination lies directly over the place of the insertion of the deltoid muscle of the left arm.

The best kind of Vaccine, the best Instruments, and the best modes of using them.

It is self-evident that fluid lymph transferred directly from an eighth day vesicle to any kind of incision made in the arm, is the most certain to infect. The best instrument to use in such a case is the Vaccinating Scarificator (Fig. 5). It is assumed that every one knows that none of the instruments here described are intended to be dipped into fluid vaccine, unless it be the Syringe Vaccinator, which has no cutting edge; as scarcely anything is more corrosive to a sharp-edged instrument than this material. The Vaccine crust or scab can be best used by introducing a small piece

of it with the Syringe Self-Vaccinator (Fig. 3). In selecting the part of the scab to be used, choose only a fragment of the hard interior part, as that is the best and most reliable. Fluid lymph preserved in glass capillary tubes, is best used by first breaking the tube at the point to which the fluid ascended in charging it, and then drawing the fractured end through, or over, the incision made by the Vaccinating Scarificator (Fig. 5). The scab, in a finely-powdered form, may be successfully used by dropping a small quantity of it into the incisions made by the instrument just named; or, if it be previously dissolved in a small quantity of glycerine, the fluid may be applied to the absorbents through similar incisions. Water may also be used instead of glycerine as a moistener, with the same mode of use in view. Dried lymph, on a pointed quill, is best used by introducing it into a valvular cut made by the Narrow Bladed Lancet (Fig. 1), and holding it there a minute or two.

Medical News.

APPOINTMENTS.

COLLEGE OF PHYSICIANS AND SURGEONS.—Thomas M. Markoe, M.D., as Adjunct Professor of Surgery.

NEW YORK MEDICAL COLLEGE. GEORGE THURBAR, M.D., Lecturer on Materia Medica, Botany, and Pharmacy. JOSEPH SCHNETTER, M.D., Lecturer on Pathological Anatomy. W. R. WHITEHEAD, M.D., of Va., Lecturer on Clinical Medicine. M. BRADLEY, M.D., Adjunct Professor of Anatomy.

NEW YORK MEDICAL COLLEGES.—The *University Medical College* commenced its regular session on Monday, Oct. 15, with an introductory address by PROF. VALENTINE MOTT. The *New York Medical College* opened its session on Wednesday, the 17th inst., with an Introductory by PROF. DOREMUS. The *College of Physicians and Surgeons* commences its regular course on Monday, Oct. 22, with an Introductory Lecture by PROF. DALTON. At no former period in the history of our Medical Schools has there been such activity at the opening of the regular sessions. The number of students who have matriculated is fully twice as great as in any previous year.

TO CORRESPONDENTS.

E. P. R.—We cannot advise your student in the choice of schools.

Answer to J. C. O.—"Allow me to recommend to your correspondent, J. C. O., the following method of treating Chordee, which I have advised for many years, viz.:—Bind the penis with a T bandage down between the testicles; that is a sure prevention, as an erection is impossible. Let me suggest, however, that an 'obstinate chordee' may be due to an abscess or chancre in the urethra, or some more serious lesion than that which follows simple gonorrhoea." SENEX.

PLATTSBURG, Oct., 18.

E. J. F.—The first part of your letter was sent as directed; the latter portion is retained for future use.

F. N. S.—Reports on the fevers which prevail in our hospitals will be made as we can collect the materials.

COMMUNICATIONS have been received from:—

Prof. W. H. VAN BUREN; Dr. C. R. AGNEW, N. Y.; Dr. E. J. FOUNTAIN, Iowa; Dr. G. GRANT, N. J.; Dr. W. B. ATKINSON, Pa.; Dr. F. N. SMITH, Ill.; Dr. W. B. FLETCHER, Ind.; Dr. J. W. HUNT, N. J.; Dr. J. L. SMITH, N. J.; Dr. DAVID P. SMITH, Edinburgh, Scotland; Dr. J. P. LOINE, N. Y.; Dr. E. K. SQUIBB, N. Y.; Dr. S. T. SAWYER, Wisc.; Dr. T. COWGILL; Dr. A. C. GARRATT; Dr. H. L. BYRD; Dr. E. M. LEBBY; Prof. J. LOWLER; Dr. R. R. LIVINGSTON; MESSEY, QUEEN & CO.; Dr. Z. PITCHER; Dr. H. JAMES; Dr. J. G. ORTON; Dr. W. T. HOWARD; Dr. T. P. HADDOCK; Dr. W. M. B. BROWN; Mr. E. C. JAMES; Dr. J. E. CLARK; Dr. W. H. ANDERSON; Messrs. JONES & WHITT; Dr. M. BRADSHAW; Dr. E. BISHOP; Dr. J. H. BEZCH; Dr. R. PAYNE; Dr. P. J. MCCORMICK; Drs. GORE & AMERMAN; Dr. S. NAVELEY; Dr. J. E. THOMPSON; Dr. S. J. SAWYER; Dr. J. J. WARD; Dr. E. VAN DYCKE.

METEOROLOGY AND NEOLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 6th day of October to the 18th day of October, 1890.

Deaths.—Men, 95; women, 85; boys, 119; girls, 92—total, 385. Adults, 180; children, 205; males, 207; females, 178; colored, 5. Infants under two years of age, 149. Among the causes of death was notice:—cholera-infantum, 9; infantile convulsions, 98; croup, 4; diarrhoea, 15; dysentery, 8; scarlet fever, 15; typhus and typhoid fevers, 90; pertussis, 7; consumption, 51; small-pox, 5; dropsy of head, 10; infantile-maramus, 84; nervous system, 69; respiratory, 105; digestive, 93.

The number of deaths compared with the corresponding weeks of 1888 and 1889, and of last week, was as follows:—

Week ending October 16th, 1888,	490	Inc. 45
Week ending October 15th, 1889,	866	Inc. 19
Week ending October 6th, 1890,	422	Dec. 87

SEPT.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Eatin.
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.							0 to 10	In.
7th.	29.80	.44	58	44	60	8	14	NW.	0	
8th.	29.55	.11	57	47	66	7	10	SW.	4	.21
9th.	29.61	.07	58	45	60	9	14	SW.	6	
10th.	29.80	.14	60	50	66	6	9	SW.	1	
11th.	29.84	.11	64	55	68	5	9	SW.	8	
12th.	29.97	.11	58	47	58	8	12	NW.	8	
13th.	30.04	.10	50	45	56	7	13	NE.	8	

REMARKS.—7th, fine; wind calm A. M., fresh P. M.; 8th, fine; wind fresh all day, rain early evening, clear late at night; 9th, wind light, with variable sky; 10th, fine with light wind; 11th, sultry with light wind; 12th and 13th, mostly calm; on the 13th, air chilly, precursor of a North East storm.

MEDICAL DIARY OF THE WEEK.

Monday, Oct. 22.	{ CITY HOSPITAL, Surgery, Dr. Peters, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Macready, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Oct. 23.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, half-past 1 P.M.
Wednesday, Oct. 24.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Gouley, half-past 1 P.M. PATHOLOGICAL SOCIETY, half-past 7 P.M.
Thursday, Oct. 25.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Peters, half-past 1 P.M. BELLEVUE, Medicine, Dr. Elliot, half-past 1 P.M.
Friday, Oct. 26.	{ CITY HOSPITAL, Dr. Parker, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, 1 1/2 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Oct. 27.	{ BELLEVUE, Drs. Parker and Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

BELLEVUE HOSPITAL.—On Saturday (this day), Oct. 20, DR. JAMES R. WOOD will give a *Clinical Lecture on malignant diseases of the female breast, and remove a cancerous breast.*

COLLEGE OF PHYSICIANS AND SURGEONS.—The introductory Lecture will be delivered by PROF. JOHN C. DALTON, on Monday, Oct. 22, at half-past seven o'clock P.M.

BELLEVUE HOSPITAL.—The Winter course of Clinical Instruction in this Institution will be opened on Wednesday, Oct. 24, at a quarter past one o'clock P.M. Addresses will be made by DR. JOHN W. FRANCIS, President of the Medical Board, PROF. VALENTINE MOTT, and others. Members of the medical profession, and medical students, are invited to be present.

Original Lectures.

CLINICAL LECTURE

DELIVERED AT THE NEW YORK HOSPITAL.

BY JOHN H. GRISCOM, M.D.

ATTENDING PHYSICIAN.

GENTLEMEN: The medical service of this hospital for the month just closed (August), has furnished us with several matters of interest, and in addition to the semi-weekly visits which you have made with me to the bedsides of the patients, I desire your attention at this time while making a general *résumé* of the month's experience, and a review of a few of the individual cases. The fact which first attracts attention, upon casting the eye over the record, is the extraordinary amount of that form of fever which, in contrast with former years, forms so marked a feature of hospital practice. I allude to what is known in hospital parlance as Chagres, or Panama fever, a name derived from the geographical section whence a very large portion of it is brought to us. We have been accustomed for many years to see a similar type of fever from several southern ports, as Savannah, Wilmington, and others as far north as Richmond and Norfolk, but only since the auriferous developments of California, and the consequent attraction of thousands of voyagers over new lines of travel across the Isthmus, a land of bogs and miasma, has this disease almost monopolized the medical division at this season of the year. Such is the tribute which humanity pays to wealth. Although we have more or less of this peculiar fever all the year round, yet the most prolific months are July, August, and September. We are scarcely surprised, therefore, that during the month, of the 192 cases of all kinds which have been under treatment, about 70 were of this character. Though so numerous, and many of them presenting on admission great severity of symptoms, showing the weighty character of the paludal poison which had been imbibed, even in several instances to the development of a train of symptoms closely resembling those of typhoid fever, it is gratifying to be able to state that the record of mortality from them is almost entirely clear, one only having succumbed.

The type of this fever, although in some instances assuming the intermittent, was generally the pure remittent, having but one chill, with which the attack was ushered in. With regard to the treatment pursued in these cases, they may be divided into three classes:—first, those in which quinine, the great antiperiodic, was alone indicated. These constituted a large proportion of them, and in combination with good nutritious diet, and general warm bathing and cleanliness, the quinine constituted the all-sufficient remedy. The second class, a smaller number, comprised those to whom it was found necessary to exhibit some form of ferruginous medicine, in addition to the quinine. The citrate of iron in combination with the tinc. cinch. c. was the form generally employed, though occasionally the cit. ferr. et quin. was used, and proved a most valuable remedy. The third class consisted of those in which it was found necessary to administer powerful stimulants, brandy, wine, and even carb. ammon., to rescue them from excessive prostration, and indeed, in some cases, from a state of collapse upon which they seemed to be verging, or had actually reached. Fortunately there were but few instances in which there was any serious local complication to embarrass the otherwise plain indications of treatment.

Another marked, and an agreeable, contrast between the hospital experience of the present year, and some of the recent past, consists in the diminished amount of ship fever. One vessel only, the *Cynosure*, has supplied us during the month with cases of that disease, and very few at that, and generally of a mild character.

Of delirium tremens we have had a rather larger invoice
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than usual; but I pass this disease for the present, designing to speak of it more at length at the close of these remarks.

Quitting these generalizations and turning our attention to some of the individual cases, I ask you to recall to recollection the case of *Phlegmasia Dolens*, which has been in the female ward nearly all the month, and still continues there, with but little prospect of an early discharge, except it be by death. This case, a very rare one of a hospital experience of sixteen years, though marked by all the characteristics of this singular disease, and what is unusual, involving both lower limbs, is nevertheless not under treatment for it. This patient, who is thirty-four years of age, entered Aug. 5th, having, as you may remember, given birth to a child about six weeks before. Her labor was complicated by *placenta previa*, which involved the loss of a large amount of blood, but no other difficulty, and she convalesced so as to be about in a fortnight. Soon after this the right leg became swollen, cedematous, and painful; the same symptoms, in a fortnight more, attacked the other leg. You have observed, I doubt not with great interest and sympathy, the very pale, emaciated appearance of this poor woman, with her pulse at 120 and feeble, her tongue highly furred, her appetite poor, and sleep restless. The serious complication of an extensive bed sore over the sacrum, denuding that bone in nearly its whole extent, together with the exceeding prostration resulting from both the original and secondary evil, renders any direct treatment for the former out of the question. On her admission, the swelled, painful, and heated limbs, with the shining appearance, so peculiar to this disease, gave such evidences of acute action (though chronic as to time) as to justify, in my opinion, the soothing application of cold water dressings. Accordingly a roller bandage was placed upon each limb from toe to hip, and a moderate degree of moisture applied. This soon effected considerable reduction in both the size and temperature of the limbs, and the water was then discontinued, while the dry bandage was allowed to remain. At the same time it was necessary to sustain the failing strength of the system. Tonics and stimulants, with the most nutritious and easily assimilated food that could be retained by the stomach (which was somewhat rebellious) were exhibited. In addition to the troubles mentioned, an erysipelatous swelling has appeared over the left hip joint, which is exceedingly painful, and has an cedematous feel; no fluctuation is yet apparent, though it is threatened.* The patient lies upon a water bed, but unfortunately the circular air cushion, which was provided to relieve the bed sore from pressure, cannot be borne. We leave her to the judicious oversight of my successor, Dr. Bulkley, with some hope but many misgivings as to the issue.

In the same ward is a girl with *hydro-pneumo-thorax*, the interest of which is enhanced by misplacement of the heart, the apex of that organ being thrust nearly as far to the right, as it is normally on the left side. This is undoubtedly the result of the pleuritic effusion, which, however, to effect this, must have existed to much greater extent than at present. The existence of fluid is proved by the presence of that interesting symptom, the *metallic tinkling*, on succussion of the thorax, and this sound being very low down indicates a comparatively small amount of fluid. This derives confirmation from the fact that ordinary respiration is not accompanied by this peculiar sound, which is developed only by the expulsive expiration produced by coughing. A generous diet, with the exhibition of ol. jec. asel., has already considerably improved the patient's strength, and the absorption of the effused fluid is evidently progressing.

Of the cases of *albuminuria*, of which we have had a number in the various wards, I forbear to speak with much particularity, inasmuch as Dr. Bulkley has already, in his clinical discourses, given you some of his experience in

* A subsequent examination revealed fluctuation and crepitation in the gluteal space, which an incision showed was caused by a fistulous extension from the bed sore.

relation to that subject. One case, however, I may notice, on account of the enormous distension of the cellular tissue. It is that of Lockwood, in Ward No. 8, whose legs, thighs, and abdomen have attained to about treble their natural size. An effective, though not very agreeable means of relief for the over-distended tissues, has been established, as it were by nature, through a solution of the skin in two places, one on the upper and outer part of the right thigh, and the other on the outer side of the left ankle, from each of which openings there is distilled daily the enormous amount of from one to two quarts of serum. These *safety valves* have contributed not a little to relieve the pressure, in the failure of the means employed to increase the renal secretion. Within a few days, however, more success has attended our efforts to increase the flow of urine, the most effective means being the ordinary diuretic decoction of the house. We have given a fair trial to the apoc. cannab. in this case, without any appreciable result, though in other cases we have seen decidedly beneficial effects from it. The serious organic derangement of the kidneys in this case proves by the presence of large quantities of albumen, together with fatty globules and fibrinous casts in the urine, almost forbids the hope of permanent improvement, though this prognosis does not always obtain, even in strongly marked cases of Bright's disease, as, in the case of the young man, Connor, in Ward 14, who came in six weeks ago, with almost as much distension of integument, and other symptoms equally well marked, but who is now before you, and about being discharged. The microscopic examination of his urine revealed blood-corpuscles, fatty casts, oil globules, and epithelial scales, but no pus. His treatment has been purging with pulv. purgans, and the following:

R. Inf. Buchu, Oj.
Potass. acet., ʒi.

Capt. ʒss. qq. 4.h.

M.

together with the use of the hot air bath, morning and evening. Under this treatment the urine, though continuing to present the same appearances under the microscope, rapidly increased in quantity, and as you now see, the cedema has almost entirely disappeared, and the strength and natural complexion are restored.

The next and last subject to which I invite your attention to-day, is that before alluded to, *delirium tremens*, only one point of which, however, will especially occupy us at the present time. Permit me to illustrate my purpose by the brief recital of a case which occurred under my observation in private practice, a short time ago. A young and enterprising German grocer whom I had known professionally for several years, finally became so much of a consumer of his own goods, as to bring upon himself an attack of this disorder. On visiting him at his house, and recognising at once the nature of the complaint, I placed him under the treatment now so well established as the most successful—viz. the exhibition of opiates to quiet the excited brain and nerves, and induce sleep, and at the same time after evacuating the overloaded biliary organs and bowels, to get in some food as early as practicable. In due time the return of sleep, though partial, and the reception of a little food, gave promise of a restoration to health, and on a Saturday being called from the city to remain till Monday, I left him with full directions for the continuance of the treatment, and that a brother practitioner, in whose judgment I had full confidence, should be sent for, should there occur any new symptoms or a return of the old ones. On visiting him on the morning of the following Monday, a period of less than forty-eight hours having elapsed, I found indeed not only a renewal, but an intense aggravation of all the worst features of the case. He was in the wildest excitement of delirium and muscular exertion, requiring four stout men, one at each limb, to keep him from tearing everything to pieces, and heedless of all remonstrances, or efforts at pacification. Astounded at this change, and looking around, after giving directions for securing him by sheets and straps to the cot on which he lay, I saw upon the wall a *large spot of blood*, and on asking for an explanation I learned that the patient

had been bled from the arm about a quart. The professional gentleman in whose care I supposed I had left him, had not been sent for, but another person, an irregular practitioner of some notoriety, had been called by an officious friend. While superintending the confinement of the patient, and giving directions for his treatment, this individual walked in, and I then had my first and last interview with him. Calling him aside, I asked him if he knew the nature of the difficulty under which the patient labored. He confidently replied that he did—it was "*inflammation of the brain*." "And you bled him?" "Yes." "Then allow me to say that you have killed him. You have entirely mistaken his disease. He has *delirium tremens*." This unpalatable idea was indignantly repelled. We returned together to the bedside of the patient, and in about five minutes, in the midst of a violent convulsive effort, he suddenly expired before our eyes. Rarely is so prompt and severe a lesson taught, of the value of a correct diagnosis, and in but few diseases does a mistake lead so rapidly to so serious a result.

With this introduction to the subject, your attention is now asked to a few remarks upon the *differential diagnosis* of Phrenitis and Delirium Tremens. In a hospital situated as this is, there is much less danger of an erroneous diagnosis than you will sometimes find in private practice. Here the character and social position of the patients are such, generally, that their personal habits are unconcealed either by themselves or their friends, and the true nature of the trouble is almost instinctively revealed. Still, even here we have cases in which great care is necessary to avoid the serious mistake; while in private practice, the difficulty of a correct diagnosis will often be greatly increased, by every effort being made to conceal the depraved habits of the unfortunate individual which have induced the disease, and it will oftentimes be demanded of you to avoid speaking of it as the truth would justify. Even in the certificate of death, should there be occasion for one, you may find it expedient to give the cause any other designation, than that which will record a perpetual stigma upon the memory of the dead, and the feelings of surviving relatives.

There is no doubt that "Consumption," "Convulsions," "Nervous Fever," &c., in our necrological tables, would, if properly translated, in hundreds of instances annually, mean *mania à potu*.

You will infer from the case I have cited, that there must be a similitude in some of the features of these two diseases, calling for careful discrimination; and you have seen that the diagnosis leads to treatment, proper and necessary in the one case, but *fatal* in the other. Before inquiring into the distinctive characters of the two diseases, let us trace these points of similarity.

You will readily believe that manifestations of disease involving mental derangement, and other high wrought nervous symptoms, which point to the brain as the organ chiefly involved, may easily be regarded as dependent upon inflammation or congestion of that organ, and that, however diverse may have been the remote causes of such symptoms, the first impulse to treatment would naturally be, the reduction of the circulating force, by the abstraction of blood, either general or local.

The coincident symptoms in the early stage of the two diseases are, general inquietude, restlessness of body and eyes, disturbance of stomach, nervous excitability, flushed countenance, vigilance; and at a later period, maniacal deportment and language, with violence of manner—all of which, in varied degree, exist in both cases, and without careful consideration, may lead to the serious error alluded to.

But when we come to examine, without prejudice, the points of difference, there can be but little difficulty in making up a diagnosis, and I now ask your attention to the following, constituting the *Differential Diagnosis* of the two diseases.

There are, perhaps, some other minor points of difference, though none, I believe, that can be set down as invariable, and the following are presented, not as a full enu-

meration of all the symptoms of each, but rather for the purpose of laying down a general chart of the soundings of this sometimes difficult navigation, and to show the rocks and quicksands which must be carefully avoided.

PHRENITIS.

1. Commences with acute pain in the head, more or less intense.
2. Nausea and vomiting generally observed.
3. No muscular tremor.
4. Eyes red and sparkling, rather shunning the light, growing wild and furious in expression as disease progresses.
5. Hearing at first intensely acute—in advanced stages lost.
6. Vision imperfect and deceptive; objects assume unnatural colors.
7. Pulse small, frequent and tense.
8. Skin hot and dry.
9. Delirium, soon assuming the form of wild and furious mania; patient screams, uses violent and profane, or indecent, language.
10. Coma supervenes in advanced stage.
11. Sense of feeling, like audition, highly acute.

DELIRIUM TREMENS.

1. Commences with giddiness and sense of oppression in the head, but no pain.
2. Nausea and vomiting variable, generally light, often entirely absent.
3. Tremor of hands and tongue, almost invariable.
4. Eyes not red, wide open, mild in expression, restless, with quick glances, often fixed intently on some object for a time, and suddenly withdrawn.
5. Hearing not particularly affected except by imaginary voices and sounds.
6. Vision correct as to real objects, but imaginary objects abound.
7. Pulse full and soft, and but little increased in frequency.
8. Skin cool, soft, and covered with perspiration.
9. Delirium takes the form of loquacity, with the apparition of ludicrous or frightful objects.
10. Coma never occurs, but the mind is agitated, and body in constant action; patient calls for help against imaginary evils.
11. More or less indifference to pain;—partial anæsthesia.

Another important distinction, which you may sometimes find it difficult to make, and of which we have had an instance during the past month, is that between *delirium tremens* on the one hand, and Insanity on the other. I allude to the sailor who was brought into No. 2, the ward appropriated to *delirium tremens*, a few days ago, the general history of whose case, as derived from the friends, might very readily lead to the conclusion that he was a proper subject for that department. I called your attention to the case as one of somewhat doubtful diagnosis for two or three days—the manifestations each day varying to such an extent, that each visit induced a suspension of definite judgment. He is one of a yacht crew, and exhibited symptoms, which, to us who knew nothing of his previous habits, might very readily be construed, in one of his class, into the effects of over stimulation. In a few days he became very violent, throwing himself forcibly about, and endeavoring to bite his nurse, so that he required confinement by straps.

Although in this case there was no special demand for treatment, beyond attention to the secretions and evacuations, yet the evidences of cerebral disturbance were prominently marked. When we came, however, to look for the symptoms, one by one, of *delirium tremens*—as laid down in the foregoing schedule—they were so generally wanting that we were obliged to dismiss that from consideration. Under the same test, there were no evidences of Phrenitis, and these being both excluded, there remained only one conclusion, that it was a case of acute mania, and such it eventually proved to be.

In a very elaborate monograph by Dr. Conquest Cross of

Kentucky, published as a prize essay by the New York State Medical Society in 1831, he maintains the existence of "no less than four separate and distinct varieties of *delirium tremens*," which he distinguishes by the respective names of *ethenic*, *hypersthenic*, *asthenic*, and *bilious*; a nomenclature which sufficiently characterizes them in his estimation. If by this classification the essayist means merely the various modifications of the disease resulting from varieties of temperament, or constitutional difference in the individuals attacked, we may admit the arrangement, and the catalogue might even be lengthened; but if he is to be understood as asserting that there are so many different forms of the disease, like the different types of fever which are found in the nosology, for one I am unable to coincide with him. *Delirium tremens* is a combination of symptoms essentially the same in all cases, having one and the same cause, modified in its development only by the idiosyncrasies of its subjects, and amenable to the same general course of treatment, varied only to suit the varied circumstances of each case, and these variations may be almost infinite. With equal propriety might those adjectives be applied to any other specific disease, as small-pox, typhus fever, peritonitis, etc., and they hence be regarded as separate and distinct varieties of those diseases, when the difference would not be in the disease, but only in the conditions of the afflicted bodies.

In conclusion, with a few words upon the treatment of *delirium tremens*, I leave the subject to your further practical investigation, with the too abundant opportunities which this hospital furnishes.

You have incidentally heard enough to authorize the inference that there is one thing in particular to be most carefully avoided in the treatment of this disorder, viz. *blood-letting*. And not only is the loss of blood, by any means whatever, to be deprecated, as almost certain to lead to a serious issue, but every other source of physical depression, as saline cathartics and the like, is to be excluded as tending to a similar result. A satisfactory *a priori* reason for this will be found in the fact, that the patient's manner of life prior to the development of the maniacal symptoms, has been such as to produce not only a depraved condition, but also a deficient amount, of blood, and hence the loss of even a small quantity, must aggravate the symptoms. The highly excited and irritable condition of the brain and nervous system produced by over-stimulation, is increased by the absence of the tonic support which they normally receive from healthy blood, and to detract from the already weakened prop which they have in that fluid, enfeebled and vitiated as it is in this disease, must necessarily increase the irritability, even to the sudden snapping of the attenuated vital thread.

Allusion has been made to the remedial course which is chiefly to be relied upon—the *remedium magnum*, as it has been called. In *optum* we have the means of a direct alleviation of the irritability of the overstrained nerves, and of inducing the so-long absent, the so-much needed, the essential, "sweet restorer, balmy sleep." But before resorting to this potent remedy, it will be found very generally advantageous to evacuate the overloaded abdominal viscera by an emetico-cathartic. In doing this, regard must be had to the important principle before descanted upon, in connexion with the use of the lancet, viz:—to avoid depression of the physical strength, and force of the circulation. On this account you must avoid the use of the tart. ant. et pot. Your reliance should be generally, for this purpose, on ipecacuanha, in doses of from 20 to 30 grains in combination with 10 of chlor. hyd. The effect of the administration of this powder is, generally, the disgorgement of a large quantity of vitiated bile, and a free evacuation of the primæ viæ, giving great relief to the system, and preparing the way for the subsequent special treatment.

So important, so essential, is sleep, that it in reality becomes the first aim of the prescriber. To use the language of an experienced observer, "it must be had *côte qui*

code,—the patient must sleep or die." There are, indeed, but two cardinal points to be kept in view, in the treatment of *delirium tremens*, viz. *sleep* and *food*, both more or less difficult, and sometimes impossible, of attainment (the stomach having lost its tone), but therefore it is that upon the *first nap*, and especially if accompanied with a "plate of soup," we are accustomed to regard the patient as out of danger.

I need not dwell upon the other remedies which are occasionally employed in the procurement of quietude, and the soothing of the excited brain and irritable nerves—such as assafetida, camphor, lupuline, etc., which are all more or less valuable under various circumstances, which a little experience will enable you to discriminate. Nor is it necessary to dwell upon the use of alcoholic stimulus, itself the cause of the evils we seek to remedy. Suffice it to say, that however repugnant to one's moral sense may be the idea of an exhibition of the bane, there nevertheless sometimes occur circumstances in which it becomes, as it were, its own antidote. It is to be administered in this disease, on precisely the same principles as in others. Excessive prostration and exhaustion, produced by the sudden withdrawal of the accustomed stimulus, constitute the principal source of danger, and the reason for its use. Under such circumstances the exhibition of ale or porter, or at times a still stronger stimulus, is plainly indicated, at the same time that opium is the sheet-anchor which is to keep the shivering bark from foundering.

On the other hand, many cases are brought under our care in this Institution, of so tractable a form, as to need only the soothing influences of a warm bath, a comfortable bed, a quiet room, and good diet, to compose the wild and erring fancy, and restore the shattered intellect to its proper bearings. Such was the case of the man, who, though young in years, is old in dissipation, whom we have this week past treated for his *eighteenth attack* of this disease.

MEDICAL COLLEGES:—INTRODUCTORIES.

UNIVERSITY MEDICAL COLLEGE.

The Introductory Lecture to the regular course of the University Medical College was delivered Oct. 15th, by Dr. Valentine Mott, Emeritus Professor of Surgery. It consisted of a review of the present state of the several departments of medicine, and the advances which had been made in each during the past few years. He also referred to the manner in which the different branches were taught in the institution, and concluded with some wholesome advice to those who were about to enter upon their studies, enjoining the necessity of untiring application on their part as the *only* means by which success could be attained in after life. The address was one in every way suitable to the occasion, and was listened to with marked attention by all who were present.

COLLEGE OF PHYSICIANS AND SURGEONS.

Prof. DALTON chose, as the subject of his Introductory Lecture, *The History of the Circulation of the Blood*. He first drew the attention of his audience to the scene which was presented in the laboratory of the anatomist of Pavia, Asellius, on the 23d of July, 1622, when the lacteals were first exposed to observation. The eagerness with which this great anatomist seized upon the discovery, and the philosophical manner in which he pursued his investigations until he completely demonstrated the function of this system of vessels, was adduced as an example worthy of imitation, and a proper introduction to the historical notice of those long continued but patient researches, which finally culminated, through the genius of Harvey, in a thorough knowledge of the circulation of the blood. Prof. D. then took a rapid survey of the labors of those anatomists, who

from the time of Galen to that of Harvey, directed their studies to the elucidation of the mysteries of the circulation. The progress of discovery in general anatomy was traced, and the bearing which each newly established fact had upon the ultimate result was shown. Galen, whose authority remained unquestioned for more than a thousand years, had made a considerable advance upon his predecessors, by proving that the arteries, as well as the veins, contained blood, but fell into great errors in regard to the office of the liver, the course of the circulation, and the anatomy of the heart. Vesalius was the first to break the spell with which the authority of Galen seemed to bind subsequent students of anatomy. "Many of you," said Prof. Dalton, "have seen a picture of the great Belgian anatomist, preparing to engage in his anatomical dissections. He is alone in an upper room, lighted through the half-closed shutters of an attic window. On one side is the old folio of anatomy, whose leaves he has turned so often, and whose statements he is about to verify or correct. On the other are the implements of his work, placed ready to his hand. Before him is stretched the subject which he is to examine; and as Vesalius, with one hand, feels the long prominences which are to guide him in his incisions, and with the other reaches out to grasp the handle of the scalpel, his eye rests upon the crucifix that hangs above his table, and seems to forbid the sacrilege, with a mingled expression of reverence and determination. He does not disregard religion, but he disregards the interpretation of it which others assume to force upon him; and with every feeling of respect for its spirit and injunctions, he throws himself thoroughly and confidently upon his own interpretation, as the last and the surest guide for him to follow. You can see that he will not be turned from his purpose by the prejudices which he believes to be based in ignorance, and strengthened only by usage. Such independence of thought and action, guided as it was in time by the best of motives, could not fail to make him a master among his medical brethren, and to secure for him the reward of professional success." The researches of Harvey and the course of experiments by which he finally demonstrated the circulation of the blood, were traced with much minuteness. In conclusion, the Professor made the following application of the subject of his discourse:—"I have gone through with this rapid recital of the discovery of the circulation, in order to offer you an imperfect illustration of the nature of the profession which you have come here to study. I need not tell you that it gives but the merest glimpse of its magnificent extent, and the richness of its domains. Even Harvey did not tell us everything about the circulation of the blood. Since then its history has been continued by the discovery of the capillary blood-vessels by Malpighi, and their distribution in all the different tissues and organs by succeeding microscopic anatomists; by that of the alteration of the blood in the lungs, and in different glandular and excretory organs; its constitution, its temperature, its color, and the variations which it undergoes in the circulation. And still, the question so far from being exhausted, only increases in extent and interest, and is to-day one of the most promising and fertile subjects in the whole range of physiology. These discoveries, however, relate to only a single topic in one department of medicine. Not only in physiology, but in pathology, surgery, chemistry, and practical medicine, there are others of a similar nature, which equally mark the continued development of a restless and advancing science. This shows us how valuable is the knowledge which has been acquired in the past, and with what labor and what mental application the secrets of nature have in part been mastered. Besides, there is no better guide to teach us how to pursue the study of medicine with success, than the history of its progress in previous ages, and the manner in which it has come down to us in its present form. It is quite erroneous, as we see, to regard medicine as so changeable a thing that our knowledge of to-day must necessarily always become our ignorance of to-morrow. No proposition in mathe-

matics is more permanent or more reliable than certain discoveries made in anatomy and physiology one thousand years ago. Those who made these discoveries, we confess, did not learn all the truths and the facts which have remained to our time; they were adopted by them, side by side with imperfect or erroneous opinions which have disappeared. But in every age, and in every department of medical study, the same qualities have contributed to its advance, and the same methods of study have always been crowned with success. The great discoverers and authorities in medicine have always testified a sincere respect for the accumulated knowledge of the past. No one, accordingly, can work to advantage with the materials of the present, unless he knows the source from which they have been derived; without that he will spend his time to no purpose in making old discoveries over again, or still worse, in repeating old blunders, and going over the wrong road twice."

NEW YORK MEDICAL COLLEGE.

THE Introductory Lecture to the regular course of instruction at the New York Medical College was delivered by Prof. R. Ogden Doremus, M.D., in the clinical lecture room of that institution, on Wednesday evening, Oct. 17th. The lecturer commenced by alluding to an inaugural dissertation presented in the year 1757, on the subject of magnesia, in which Dr. Black discussed the properties of "*fixed air*," a substance which now rejoices in the title of *carbonic acid gas*. He demonstrated the composite nature of this substance by synthetical and analytical experiments. Carbonic acid was made by burning charcoal in oxygen gas, also by the combustion of a diamond in pure oxygen, and recognised by its characteristic chemical tests. Carbonic acid was then decomposed by the action of metallic potassium, at an elevated temperature, and the black carbon exhibited. The physical and chemical properties of the gas were shown by weighing it in a vessel suspended to a large balance; by lowering a candelabrum of burning candles, first into a capacious glass jar of oxygen, where a most vivid combustion was excited, and subsequently plunging it into a large jar of carbonic acid, in which the flames were extinguished; also by pouring twenty or thirty gallons of the gas on an inclined plane of forty or fifty lighted tapers, where its descent could be traced, as candle after candle was put out. The various natural and artificial sources whence carbonic acid is derived were mentioned in detail—such as volcanoes, caverns, and fissures in the earth—by processes of fermentation, e. g. a bottle of green seal was opened, the champagne poured into a deep jar, and the effervescing gas tested and demonstrated to be carbonic acid. The relation between various combustive operations and carbonic acid was discussed—the exhalations from the lungs were analysed, and the presence of this gas proved by experiments—thus naturally leading to the theme of *animal heat*. The poisonous qualities of carbonic acid to animal life were compared with its beneficial influences to the vegetable world—where it acts as a pabulum to plants—being the raw material out of which they in chief part fabricate their woody tissues, mould their flowers, or mature their fruit, under the plastic influences of the sunbeams. The attractive experiments of Faraday and Thillorier were exhibited. Carbonic acid was shown compressed into a liquid, as pellucid as water, and subsequently congealed into a solid condition. Two large wooden bowls full of this snowy substance were shown to the audience. A portion of this responded to the tests previously applied to the gas. Another portion was placed in contact with an iron trough filled with mercury; a small quantity of ether was added to facilitate the evaporation of the solid carbonic acid, and in a few minutes the intensity of the cold demonstrated by producing a *solid ingot of mercury*. Another portion of mercury was frozen in a medallion form, put under a press, and stamped with the laboratory seal. Ten

pounds of mercury were congealed in the form of a cup, into which water was poured—presently the mercury *fused*, but the water *solidified*. A large platina crucible was heated intensely with a blast-lamp, some water thrown in it, and retained in a spheroidal condition, then poured upon the table; next some solid carbonic acid was introduced and allowed to remain for several minutes, and notwithstanding the intensity of the heat, but little evaporated. Then a mixture of solid carbonic acid and ether was placed in the red-hot crucible, and to demonstrate the intensity of the cold, a thimbleful of mercury was frozen under these remarkable circumstances. Lastly, the audience were *snow-balled with the solid carbonic acid*. The lecturer then proceeded to discuss the relationship existing between medical schools, the medical profession, and the public, and closed with an address to the medical class.

Original Communications.

ON EXTENSION AND COUNTER-EXTENSION IN FRACTURES.

BY DAVID P. SMITH, M.D.

WHEN we hear sentiments the most opposite from men of equal authority in the practice of the healing art, it behooves us to inquire particularly into the subject under consideration, and ascertain, if possible, the reason for such diversity of opinion. I am persuaded that, in this way, much good may be accomplished, and dicta, at first glance directly opposed, may help establish each other's truth. The same words do not always mean the same things, and the aid of vision must be invoked in order to make out the exact sense intended to be conveyed. Thus it is that travel is so advantageous to a medical man. He sees at a glance what pages of words would convey but a very meagre and perhaps inaccurate idea of. There are many things to be taken into account in the treatment of fractures which it is very difficult or impossible to express in words. Thus is it in regard to extension. By the word extension, the English and French mean in reality the application of severe tension by means of narrow constrictive bands wound on without any regard to the physiology and pathology of the limb. The mechanical powers are applied by means of the screw, pulley, and axle borrowed from the carpenter, and his method of applying them to the insensible timber is strictly followed by the surgeon in adapting his appliances to the bruised, tender, and swelling limb. In a word, we borrow the instrument and the manner.

Now, the best men among them, such as Syme of the present day, and Pott and John Bell of the past, have seen and recognised the grave complications arising from such *carpenter-surgery*, and have condemned it all under the name of extension. Unquestionably there are many sins of commission even now perpetrated in the United States upon broken limbs; but there are a good many surgeons now in America who have recognised the difference between fractured limbs and sticks of timber, and who do apply extension in so careful and judicious a manner, that they secure its benefits without running any risks of excoriation or irritation of the muscles. In a word, the Americans, at least some of them, by the use of extension so applied as to yield all of its advantages and none of its heretofore common disasters, are now making better cures of their fractures than any one else. But how is it that very good cures, better than the average, are made by Mr. Syme and others who scout at the idea of extension? Must there not be some guiding principle then in the treatment of fractures, the observation of which is essential, and which, though always the same, may be accomplished by procedures bearing different names, and, to some minds, seeming of different

natures. Again, fractures will be most successfully treated by those surgeons who are the best acquainted with anatomy and physiology, and know by experience what a bruised and perhaps lacerated limb can bear. When a limb, after fracture of its bone or bones, becomes shortened by contraction of its muscles, it is evident that the muscles must be extended that the fracture may be set. When it is set, those who decry extension apply well fitting splints to the surface of the limb, which prevent shortening by the *friction of opposing surfaces*. If the surgeon were able to apply to the limb a *perfectly fitting* firm shell, he would *perfectly* attain his object. He would then have all the extension he wanted. In other words, an outside bone would, if perfectly fitting, supply the place of the inside bone. The practical difficulty is to apply a *perfectly fitting* splint that may, by friction of opposing surfaces, in other words, by sufficient extension and counter-extension, prevent shortening of the limb. This practical difficulty is rendered so great by the swelling or subsidence of swelling that may greatly change the dimensions of the limb in a few hours, that it is not probable that it will ever be found safe to apply to the limb even a perfectly fitting case surrounding the whole circumference. It seems to be, taking into view the many accidents that have arisen from undue constriction, but wise prudence that a considerable portion of the limb should be exposed to view in its whole length. In order to make amends for the loss of friction of opposing surfaces in the leaving a part of the whole length of the limb bare, the splints must either be very perfectly fitted, or if the coaptated surfaces are not sufficiently extensive to prevent shortening, more force must be applied in the direction of the axis of the limb. Formerly this was accomplished by narrow bands which, by their undue pressure on a small surface, caused excoriation, sloughing, etc. etc. This is now accomplished in America by adhesive straps extending along the limb, and kept in close contact with it by the pressure of the padded splints. Now the adhesive straps furnish merely the anti-shortening force that would pertain to perfectly fitting splints, and the pressure of pads furnishes the transverse pressure of the same. To make this more evident, after padding your splints, wrap adhesive plaster firmly around them with the plaster side against the limb. Then carefully adjusting the broken limb, and extending it to its normal length, you will find, on the application of the splint fitted in this manner, that no retraction will take place, and that the friction of opposing surfaces between the limb and plaster applied thus is identical with that between extending and counter-extending bands and the limb. Thus I think it can be clearly seen that the extremes meet, and that one method, carefully applied, is exactly equivalent to the other.

EDINBURGH, Sept. 11, 1860.

Reports of Hospitals.

ST. VINCENT'S HOSPITAL.

SURGICAL CASES.

[Reported by WM. O'MRAGHER, M.D., Resident Physician and Surgeon.]

DISLOCATION INTO THYROID FORAMEN—REDUCTION BY REID'S METHOD.

JOHN H.—, a German storekeeper, 33 years of age, unmarried, was admitted to the Surgical Division July 5, 1860, under the care of Dr. T. C. Finnell. On the previous day, while walking in company with several others, he was suddenly pushed off the sidewalk, and fell on some loose stones, two other persons falling on him. When taken up, he was unable to walk or stand on the left leg, and had to be conveyed home. On admission he suffered considerable pain, especially when any attempt was made to discover the nature of the accident. The limb was flexed at the

knee, considerably abducted from its fellow, and a hollow was observed in the position of the trochanter; the foot everted, and by accurate measurement a lengthening of one and a half inches discovered. He had to be supported by pillows in a sitting position, owing to the extreme pain produced when he attempted to lie down. These facts put together pointed out a dislocation into the foramen thyroideum as the true diagnosis of the accident. Next day Dr. Finnell proceeded to manipulate the limb, as recommended by Dr. Reid, of Rochester, while the patient was under the full influence of ether. During the trial the head of the bone slipped from its first abnormal position, and another dislocation on the dorsum ili was produced; this, however, was overcome by a little forced extension, and the limb was finally reduced to its natural position. The patient was removed to bed, and the feet tied together. In five days he was allowed to rise and sit in his chair. After this he gradually began to move about, and at the end of four weeks was able to attend his business.

NERVOUS TREMOR CURED BY ELECTRICITY.

JAMES CROSBY, aged 30 years, from the country, came to the Hospital on the 4th of Sept. last. He was a man of stout build, though prematurely grey, of regular habits, and accustomed to hard labor. He was a married man, his youngest child being only seven months old, and his virile appetite unimpaired. He was attacked with a universal nervous tremor about four years previously, after having undergone considerable hardship and taken cold. This state continued all the time without any material change, with the exception of a slight alleviation while he walked or stood erect, but on sitting down the shaking resumed its former condition, when he would make every article in the room vibrate in answer to his own involuntary movements. These were more particularly apparent in the extremities, but the head and trunk were also affected, and his voice too was tremulous from the same cause. The tongue alone was unaffected, but the muscles of the face were in constant action. He had been under medical treatment nearly all the time, but to no purpose. His general health had given way a good deal, his appetite being poor, bowels constipated, and rest disturbed. Despairing of the efficacy of drugs in his case, I had him electrified every other day by means of a small battery, and after the first application the tremor abated somewhat, so much so that I was very much encouraged to follow it up, which I did, having substituted a more powerful machine, in order to increase its effect. After a few trials he improved very much; the tremor had almost subsided, his bowels became regular (a fact I have had occasion to notice in many other cases of nervous lesion, especially paralysis); he slept soundly, ate heartily, resuming flesh and strength rapidly, and went home rejoicing after a sojourn of only two weeks, with scarcely a sign of tremor, or the slightest indisposition whatever.

TEMPORARY HEMIPLEGIA FROM CONCUSSION.

JOHN M., set. 50, a porter in a carpet warehouse, was admitted to the surgical division, March 19, 1860, laboring under the effects of concussion. On the 15th inst., while crossing the basement floor, he tripped over a roll of carpet and fell heavily, striking the bridge of his nose against the sharp edge of a wooden counter. The wound, a slight contused one, bled for ten or fifteen minutes, during which time he remained insensible. When he recovered, he experienced an inability to raise or use the right arm and leg. He remained under the care of a medical practitioner for three days, and on the fourth entered the hospital. On admission, the prominent symptoms were, as described above; in addition, he had been laboring under retention of urine for three days, and his bowels had not been moved for the same length of time; the upper and lower extremities cedematous, especially on the right side; action of the heart, labored, irregular, intermittent, the pulse indicating the same morbid phenomena; speech fluttering and thick:

sleep disturbed. Otherwise he had a good appetite; the tongue, and muscles of the face, not affected; no cough; no albumen in the urine. He was of a full habit, with the appearance of a person broken down from dissipation, but this he repeatedly denied, and there was no proof otherwise to sustain the supposition. A catheter was introduced, and about three pints of red turbid urine withdrawn; a terebith enema was administered, and he slept comfortably for several hours; beef tea and stimulants in moderation were directed. This treatment was continued for several days, without any apparent benefit, the prominent symptoms remaining the same; the catheter was used twice and sometimes thrice in twenty-four hours; sleep disturbed, for which he was ordered 3 ii. U. S. Sol. Morph. The costive condition of his bowels was only effectually overcome by enemata. Gradually, however, he began to improve, the morbid symptoms gradually disappeared, and he was discharged convalescent one month from the date of admission, the irregular action of the heart alone remaining of all the other symptoms.

Clinical Record.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROF. PARKER AND MARKOE'S CLINIC.

MONDAY, OCTOBER 15, 1890.

CHRONIC FIBROUS INFLAMMATION OF ELBOW-JOINT RESULTING IN SYNOVITIS.—REMARKS BY DR. MARKOE.

MICHAEL F., blacksmith, set. 35, was engaged 20 months ago in shoeing a horse, when the animal made a sudden start, twisted the right arm of the patient, and caused a strain of the elbow-joint. For a year afterwards there was considerable swelling present, and he continued to suffer from pain and stiffness in the part. Notwithstanding this, however, he was able to work at his trade. About 8 months ago a small circumscribed swelling appeared over the external condyle; this in due time suppurated and discharged itself, leaving an opening which would not heal. His constitution is unimpaired.

Remarks.—The injury did not evidently result in acute synovitis, inasmuch as there now appear no marks of such a severe disease, and, moreover, the patient would not have been able to work as he has done. From the fact that the disease has been so sluggish, and has given such a slight amount of pain, we are justified in supposing that the inflammation was confined to the fibrous structure around the joint, causing an interstitial deposit in those tissues, and thus giving rise to the stiffness which the patient complains of. This condition is not of itself a dangerous one, only so far as it acts as a predisposing cause to other diseases which tend to produce disorganization of the joints. Now the appearance and behavior of the circumscribed swelling show that one of two things has taken place; either the localized inflammation involves simply the periosteum, or has extended itself to the synovial membrane. We conclude that the latter has taken place, in consequence of the characteristic appearance of synovial fluid which escapes at the opening when the surrounding parts are pressed upon. There is only one other condition that can be mistaken for this, and that is inflammation of the bursa; but the fluid discharged under those circumstances has not that stringy adhesiveness which is recognised as belonging to synovia. This disease is not necessarily confined to the synovial membrane, but is very apt to extend itself until the cartilage is destroyed, and perhaps the bone itself is involved. In this case, as shown by an examination with the probe, the diseased action has not extended further than the synovial membrane, but a small portion of which seems to be affected. This latter circumstance can be accounted for by bearing in mind that in such cases nature

forms a barrier of solidified tissue around an inflamed portion, thus preventing the further extension of the disease.

Treatment.—The first indication is rest to the joint, and this can be best effected by confining the limb in an angular tin splint. When this is done the inflammatory condition can be brought under control by the judicious application of counter-irritants, such as tincture of iodine, blisters, or issues, according to the special indications that may be present. If these means should fail, we have another resource in the steady use of small doses of bichloride of mercury, in addition to which stimulating injections may be used, such as a weak solution of iodine, of the bichloride of mercury, or of the sulphate of zinc. The diagnosis in this case is very favorable.

POTT'S DISEASE OF SPINE.—REMARKS BY DR. PARKER.

A German, 19 years of age, first noticed about three years ago, a weakness in the small of his back, attended with more or less pain on motion of the part. These symptoms increased until a swelling appeared on the front part of his thigh. The patient does not seem to have suffered from any marked constitutional disturbance in consequence. No hereditary predisposition discoverable. On examination, a small projection was noticed about the middle of the dorsal region, which was painful on pressure. The swelling upon the front of the thigh was fluctuating to the feel, and was traceable under Poupart's ligament into the iliac fossa. The patient was directed to arch his spinal column by stooping, to pick up something from the floor, but was unable to do so. The case was diagnosed as Pott's disease of the spine, with abscess.

Remarks.—In remarking upon the case, Dr. Parker maintained that the loss of power to arch the spinal column was the symptom to be relied on in making a diagnosis; that patients affected with the disease invariably kept the back straightened, and stooped by merely bending their legs under them. The reason for this was simply to prevent any extra pressure upon the bodies of the vertebrae in which the diseased action was located. In reference to the position of the abscess as aiding in the diagnosis from hernia, he stated that in the latter affection the swelling was invariably upon the *inside* of vessels, while in the former the tumor was found equally often upon the *outside* of those vessels. In about 30,000 cases reported by Mr. Lawrence, but one or two exceptions to this rule were found where a hernial tumor existed *outside* of the vessels.

Treatment.—The disease being always associated with a scrofulous diathesis, the treatment must be essentially tonic in character. Cod liver oil, iron, and fresh air, were the only remedies that gave any prospect of cure. The spine might be supported by a proper appliance, and the local tenderness be greatly benefited by the employment of counter-irritation. In reference to the abscess, the treatment recommended was the formation of a valvular opening, according to the plan of "Old John Abernethy," the object being merely to relieve any undue tension of the parts by allowing but a small quantity of pus to escape at a time, and also by closing up the opening to prevent the access of air to the cavity, and the consequent conversion of its lining membrane into a pus-secreting (pyogenic) surface. The object of this treatment is also to guard against ulceration of the walls of the cavity, which is obviously attended with very disastrous results to the patient. The prognosis given in this case was favorable.

UNIVERSITY MEDICAL COLLEGE.

PROF. JOHN T. METCALFE'S CLINIC.

OCTOBER 17TH, 1890.

TUBERCULOUS DISEASE OF THE LUNGS.

E. K., set. 46, a laborer by occupation, after having been exposed six months ago to cold, was seized with a cough, which in the course of three or four days was attended

with the discharge of a teaspoonful of blood mixed in the expectoration. Some weeks later he had three or four other attacks of hemorrhage, the discharge amounting in one instance to a teacupful of blood. He spits up from time to time muco-purulent matter, which is greatest in quantity immediately after rising in the morning. In the act of coughing he complains of more or less pain through the superior portion of the left chest. The right shoulder droops somewhat. There is also considerable dyspnoea present, the respiratory act being confined for the most part to the lower portions of the chest. The patient has suffered occasionally from night sweats, and has noticed from time to time a tendency to a burning heat of the hands and feet. Notwithstanding the digestive organs are and have been in a good condition, he has become somewhat emaciated. All the other functions of the body are perfectly performed. The pulse is 108, regular, soft, and of average size; respiration 40.

Physical Examination.—No difference of vocal vibration on the two sides; soreness on percussion, which is due to local inflammation of pleura, more marked on right side than left; and the percussion note under the clavicle is sharper and higher on the right than the left side; above the clavicle this difference is more marked. On the right side under the clavicle inspiration is harsh; expiration prolonged, and resonance of voice augmented. The same signs exist on the left side, except that the prolongation of the expiration, if there is a difference, is more marked. There is an exaggeration of the vocal resonance on both sides. Behind the left clavicle there exists a slight subcrepitant rhonchus, with forced respiration; on the opposite side (posteriorly) the same signs are noticed, with the exception that the part is dull on percussion. In the right intra-scapular region there is bronchial respiration and bronchophony, with a slight amount of subcrepitant rhonchus. The symptoms in the left intra-scapular region are the same, but less intensified. The heart sounds, though normal in character, are transmitted with unusual clearness to the point of right shoulder. Over the lower half of the lung posteriorly as anteriorly the respiration and voice are nearly normal.

Diagnosis.—The rational symptoms point clearly to the fact that the chest is the seat of serious disease, and the result of the physical examination certainly confirms that suspicion. The falling down of the right shoulder proves that the right lung has become atrophied, and the dullness on percussion, prolonged expiration, and exaggeration of the vocal resonance, show that the natural elasticity of the organs is interfered with. The solidification of the lung is not due to pneumonia, because this latter is an acute affection, rarely lasting over three weeks, and there are no attendant night sweats, emaciation, nor hemoptysis. It might be cancer, but this disease in the organs referred to is almost always associated with a deposit in other parts of the body, and besides it is very rare in occurrence; when, however, it does exist, it is exceedingly difficult of diagnosis. The presence of a fibro-plastic, cystic, or other tumor in the chest, might give rise to the physical signs enumerated, but none of the constitutional symptoms as shown to exist in this case would be present. Pleuritic effusion may also cause dullness on percussion, prolonged expiration, bronchial respiration and bronchophony, but all these signs are confined to the lower parts of the chest, the opposite being the case in tuberculous disease.

Prognosis.—The prognosis in this case, inasmuch as the important function of digestion remains unimpaired, is good; but more especially is this the case when we take into account that the patient has no hereditary predisposition to the disease.

Treatment.—As the disease is one of nutrition, the indications plainly enough point to the adoption of a good nutritious diet, and a tonic course generally; enjoin exercise in the open air; give cod-liver oil together with some one of the preparations of iron. Expectorant mixtures are in the main more hurtful than beneficial; the proper way to cure

the cough is by the removal of the cause of that symptom by the means already advised. These mixtures are never productive of any good in allaying a distressing cough, except they contain some preparation of opium; and such mixtures always occasion a derangement of the digestive organs. This is an important point to take into consideration in any case where the administration of the drug seems to be required.

Remarks.—The increased disposition to cough in the morning is due to the fact that during sleep the mucus is allowed to collect in the bronchial tubes in consequence of the diminution of the perceptive power of the brain during that period. Pain through the upper part of the chest, from the cardiac region to the scapula, is frequently complained of by patients suffering from phthisis. The presence of a moist subcrepitant rhonchus is accounted for either by supposing the existence of a small cavity containing partially broken down tuberculous matter, or which is by far most commonly the case, the presence of a local bronchitis. You cannot have tuberculous deposit without the coexistence of bronchitis; and local pleurisy is also intimately associated with the deposit, for there are scarcely one or two cases out of a hundred where this inflammation is not present. When hæmoptysis exists, if you exclude the question of disease of the heart, and some rare forms of disease of the lung, you may be almost certain that the cause of the symptom is referable to pulmonary tuberculosis.

PROF. WM. H. VAN BUREN'S CLINIC.

OCT. 17TH, 1890.

NECROSIS OF FEMUR—OPERATION.

THE patient, a young man nineteen years of age, was in his usual health until seven months ago, when after exposure to cold he was attacked by a violent pain in the right thigh at its lower part just above the knee. The pain became very excessive, fever came on, and he was confined to his bed in consequence. In the course of a week or ten days the fever subsided, but the swelling began to assume the character of an abscess, which at the end of a month discharged itself; at first by an opening upon the outside of the limb, and afterwards by another on the inside, nearly opposite to the former. The patient then began to get about, but the swelling became harder, and its volume continued to increase so that at the time he presented himself to the clinic it was about one-third larger than the corresponding part of the thigh on the opposite side. The two openings remained, forming sinuses which discharged pus and communicated with dead bone by a common cavity. A probe could be passed behind the bone, and completely through the limb from side to side. One extremity of the probe being slightly bent, could be passed into a small cavity on the posterior aspect of the femur.

Remarks.—The patient was seized with acute periostitis seven months ago which resulted in death of the bone; in the meantime nature has surrounded the dead portion by a shell of new bone (involucrum), which enables the young man to walk about. The dead portion is called the sequestrum, while the openings leading to the same are styled cloacæ. This man was advised to submit to an operation from the fact that dead bone was supposed to exist in the cavity of the involucrum. Six months having elapsed since the disease showed itself, it is fair to infer that the necrosed portion has become sufficiently detached to enable us to remove it. If we do not succeed in bringing away any dead bone, the object of the operation will nevertheless be attained by making a free opening down to the diseased portion. The reason why the operation is advised is in consequence of the vicinity of the sequestrum to the knee-joint and to the popliteal artery. The former is in danger of an attack of suppurative inflammation, while the coats of the latter are liable to become eroded by the pressure of

any sharp spicula that may be in its neighborhood, thus giving rise to fearful hemorrhage from that vessel. It is the possibility of these accidents that justifies the surgeon in advising an operation with as little delay as possible.

The Operation.—The patient being etherized, the operation was performed by Dr. Van Buren. It consisted in making an incision, about six inches in length, on the outer aspect of the limb along the border of the biceps flexor cruris muscle. The incision passed through the cloaca and terminated a short distance below it. A division was effected between the tendons of the biceps muscle and the vastus externus, when the periosteum was dissected up and the external surface of the involucrum exposed. An irregular opening about three and a half inches long was made through the shell of bone, by the use successively of the trephine, mallet, and chisel, and *rongeur*. The cavity thus exposed was lined by the characteristic pus-secreting velvety membrane. Several small spiculæ of bone were then removed with a forceps, and the wound afterwards dressed from the bottom in order to allow the free escape of pus, and also to favor the proper filling up of the cavity by granulation.

JOURNALS FOR SEPTEMBER AND OCTOBER.

OHIO MEDICAL AND SURGICAL JOURNAL.—Sept.

ART. I. *Remarks on the Address of Dr. Holmes before the Mass. Med. Society*, by the EDITOR. ART. II. *Notes on some of the Chemical Reactions of Nicotine and Daturine*, by T. G. WORMSLEY. ART. III. *A New Operation for Proctentia Uteri, with a Successful Case*, by Prof. J. O. BRONSON.—The mucous membrane was removed from the vaginal wall on both sides, for the space of five-eighths of an inch wide and two inches long, and four iron wire interrupted sutures applied as in a simple incised wound.

THE AMERICAN MEDICAL MONTHLY AND NEW YORK REVIEW.
October.

ART. I.—*Clinical Researches on the Action of Diuretic Remedies*, by AUSTIN FLINT, M.D.—The author gives the history of ten cases in which he reports from day to day the treatment, quantity of urine, specific gravity, and amount of solids in twenty-four hours. The acetate of potassa was given in three cases, all of which were cases of sub-acute rheumatism, with the effect of increasing both the quantity and solid constituents of the urine. The nitrate of potassa was given in six cases, viz. four of ascites dependent on cirrhosis, and two of albuminuria from Bright's disease; and in all the cases, save one, the remedy was followed by an immediate increase of the quantity of urine and amount of solids. The exceptional case was one of albuminuria in which vomiting and purging were prominent symptoms, and the remedy appeared to act as a cathartic. Digitalis, squilla, and juniper were given in combination in two cases of albuminuria; in one no diuretic effect was produced, but in the other the quantity of urine and the amount of solids were increased in the same proportion. Iodide of potassium was given in one case of albuminuria; the dose was small, and no diuretic effect produced. In one case of subacute rheumatism the wine of colchicum was given, which appeared to increase the amount of solids, while the quantity remained unchanged. The external use of diuretics was employed in three cases, in which a mixture of the tinctures of digitalis, squilla, and iodine was applied freely over the abdomen twice daily, accompanied with brisk friction, with apparent diuretic effect. The author concludes that not much reliance can be placed upon the value of diuretics in the treatment of ascites dependent upon cirrhosis, as they augment the solids out of

proportion to the increase in quantity, thereby tending to injure rather than benefit the patient; that they may sometimes be usefully employed in the treatment of albuminuria dependent on Bright's disease; that the rational indication in the treatment of subacute rheumatism by diuretics is to increase the solids of the urine, and the acetate of potassa seems to fulfil this indication. He offers to furnish a proper field of study to any competent young man willing to devote a portion of his time in the further pursuit of this subject. ART. II.—*Lecture on Displacements of the Uterus*, by E. R. PEASLEE, M.D. ART. III.—*Lecture on the Physiology of the Circulation*, by J. C. DALTON, JR., M.D. ART. IV.—*A new instrument for the local application of anæsthetic and stimulating vapors for deafness, neuralgia, &c.*, by H. P. DEWEES, M.D., NEW YORK. It consists of a delicate retort with nozzle projecting an inch and a half, perforated by a capillary aperture, and a supply-tube rising about an inch above the level of the curved neck; this being filled with ether is placed in a glass-receiver, filled with moderately warm water, and the nozzle applied to the part affected.

SCHOOL VENTILATION.—In this age of gregarious charity, we too frequently see benevolent impulses leading to the most pernicious maleficence. A blind propensity to do good, goaded into activity by want of rational occupation, originates the wildest projects of human reformation and modelling, and attempts to carry them out with an almost incredible recklessness as to means and secondary consequences. Churches are built with every conceivable defect of arrangement and ventilation, endowed with the pittance of a Manchester weaver, and the poor of the neighborhood crowded into them, under the relentless tyranny of a well-organized brigade of district visitors. The pallid face of the gasping preacher, and the worn and weary aspect of the congregation, are easily interpreted by the physiologist. The souls supposed to be saved are hurried into eternity from that fetid atmosphere without remorse. The most picturesquely infantile schools spring up in every parish. Mediæval romancers point with delight to their high-pitched roofs, tiny windows, and thermometers with columns of mercury motionless as bars of iron. Charming, but stupifying, equability, of temperature! If in a village, we are sure to find them in the nearest proximity to some stagnant pool; if in a town, in the darkest and closest corner. Now it may be very gratifying to the good people concerned in these depopulating processes to pique themselves upon their facile accommodation to circumstances, and their pliancy in stooping to the level of the poorest and the lowest. But if we follow out their doings beyond the forcing of a few ephemeral creatures up to the standard of some flashy and flippant school inspector, we meet with traces of irredeemable evil at every step. Designs planned in ignorance are committed to the working of ignorant agents, who, when they encounter thwarts and difficulties, grow exasperated, peevish, and more rigidly severe and unjust in their discipline. Children are gathered together in these "educational" places, like the Strasburg geese, are crammed with crude, miscellaneous elements of all the sciences, driven to "Divine worship" twice a day to endure Eburian tortures, collectised, catechised, biblicised, and textified, in the intervals, by some devoted lady patroness, who marvels at the reluctance and lethargy of her *protégées*, attributes the irritability and sluggishness resulting from overtaken powers and bad atmosphere to innate wickedness and obstinacy, insists upon submission, orders punishment, and is indigantly inflexible. She expects penitence and amendment, and gets the semblance of it; while she crushes some spirits, taints many minds, and leaves the trail of retrograde change and disease in every delicate organization she has the care of.—*Medical Times and Gazette.*

American Medical Times.

SATURDAY, OCTOBER 27, 1860.

MEDICAL EDUCATION.—ITS TENDENCIES.

THE opening of the medical schools inaugurates the medical session of the year. No annual event, properly considered, is of equal importance to the republic of medicine. Yet we fear that it too often passes unheeded by our profession, simply because its significance is not appreciated. Let us consider its bearing upon the future of American medicine. The four or five thousands of students who are now gathering in the schools throughout the country, are the recruits who are to replenish and swell the ranks of that army of practitioners which now numbers in this country not far from forty thousand. Is it of little consequence that these recruits are qualified by education, habits, and moral training for the peculiar service of the physician! They are to be our brethren, our equals, and in the progress of events they are to be the exponents of the character of our profession, and give it rank in the popular regard. If they are thoroughly qualified by previous education, and bring to the investigation of the abstruse science of medicine, minds well disciplined to patient study and accurate research, then will they become masters in its various departments, and in subsequent life will sustain its reputation as a learned profession. If in addition to educational qualifications, they have correct morals, and sensibilities keenly alive to the sufferings of their fellows, then will they confirm its reputation as the most humane profession. But if the majority of those who are now about to enter our ranks have but a limited education, dissolute and profligate habits, and are seeking personal aggrandizement as the end and aim of life, then they will degrade the profession to which they belong in the estimation of all whose opinion is entitled to respect and consideration. Could we determine the character of the recruits that are to-day admitted to the ranks of the army, we could with certainty foretell the value of that army, when the struggle of the conflict comes. We need scarcely add that if we judge from the past, many who now enter upon their medical studies have no proper qualifications. We could wish that it were not so; that those who stand at the threshold of the temple as its guardians, would carefully scan the applicants for admission, and turn away to more congenial pursuits the ignorant, the immoral, the unworthy. Every association of men, for whatever purpose, guards vigilantly the door through which accession is gained to its ranks. The wisest and most trustworthy are stationed at the portals to examine each candidate that no improper person may become a member of its select body, and change the peculiarity of its original organization. But the ancient and honorable profession of medicine gives little heed, in this country at least, to the character and trustworthiness of those who guard the portals of its temples. Unconcerned it witnesses the annual influx of members, and sees the most unworthy too often elevated to the privileges and honors of its order without a remonstrance. It is true that hitherto the profession, as a body, has lacked the organization, and consequently

the power, to protect itself from these degrading associations. The field of legitimate medicine, like a wide domain imperfectly hedged, is guarded by mercenary sentinels, and thousands, unqualified, annually purchase admission, and with the most meritorious garner its rich fruits. But a better day is dawning upon American medicine, and a brighter era will ere long occur in its history. The profession at large has an organization which is already sufficiently powerful, were its forces but properly directed, to protect its own domain from further incursions. Through the medium of the American Medical Association, it can erect such defences as it chooses, and dictate, authoritatively, who may, and who shall not, be admitted to its highest privileges. That it cannot compel the educating bodies, as by legal force, to scan more closely the preliminary qualifications of students, and indicate the standard of educational qualifications of graduates, is very true; but it can by suitable organization establish its *own* standard of education, have its *own* examining body, and confer its *own* degrees. The exigencies of our times demand this of the American Medical Association; the honor, dignity, and character of American medicine are approaching a crisis which this body can avert. We may not now indicate the precise steps by which this great reform is to be accomplished, but that the initiatory step must soon be taken, and the work resolutely prosecuted to its consummation, no one who has at heart the honor of our profession can for a moment doubt. In the collection of medical schools which it was our privilege to present in the students' number of the MEDICAL TIMES, we have, we think, laid a foundation for rational speculation in regard to medical education in the United States. It not only affords the opportunity, much needed, of learning the advantages which the schools in different sections of the country offer to students, but what is of more consequence, we there learn the value which each school attaches to its diploma. This valuation indicates their standard of medical education. It is not our intention at this time to enter upon that critical examination of the subject of medical education, to which this collection invites us, but simply to offer some general conclusions which are apparent on a superficial examination. What will, perhaps, prove to the mass of readers the most marked difference in our medical schools, has a sectional bearing, viz. between the Northern and Southern schools. It will be noticed that the fees in the Southern schools are uniformly high, those most recently established having a scale as high as the largest and most favored schools of the North. Among the Northern schools the scale of fees varies from the lowest of the Southern schools, to the price of the parchment for a diploma. If the scale of fees indicates anything as regards the estimate of the school of its educational advantages, and the value of a thorough medical education, this exhibition of figures shows a vastly higher appreciation of a medical education at the South, than at the North. The next most striking feature in the schools is the almost universal interest now manifested in clinical instruction. This is indeed the most hopeful sign of the times. Heretofore the importance which the schools attached to clinical advantages depended entirely upon the facilities which their particular location happened to afford. The school so unfortunate as to have a situation distant from any hospital or infirmary, loudly decried clinical instruction, and

many will remember that a venerable professor went so far a few years ago as to regard it as absolutely injurious to the student. Schools situated in our lake and seaport towns, saw their advantage, and vaunted their facilities for clinical instruction, and, not unfrequently, published in their annual circulars a list of all the medical institutions of the town, many of which were not even open to a transient visitor. Although clinical instruction, as given in our colleges and hospitals, lacks system, and is as inefficient as it well can be, still we attach to it so much importance, that we regard this evident desire on the part of the schools to afford such advantages to their pupils as in the highest degree encouraging. Again, it will be noticed, that nearly all of our most flourishing schools have large Faculties, and lengthened courses of instruction, several extending their terms to five months. This fact is worthy of notice, as it is due to the direct influence of the American Medical Association. In concluding these desultory remarks, which the opening of the medical session has suggested, we may add that a careful observation of the history of our educational bodies for the last few years, reveals certain inevitable tendencies which afford reliable data from which to cast the horoscope of the medical schools of this country. Clinical instruction is to become the *sine quâ non* in a course of medical education, and hence those colleges located in populous towns which abound in public medical charities, will make the strongest appeal to students, and gain the largest classes. Those cities, again, which offer to the schools the largest advantages for hospital practice, will become inevitably the centres of medical education. Nor is it difficult, in the light of the above facts, to indicate the cities which are to be crowned with this proud distinction. That different sections of our wide extended republic must have their own schools of medicine, in which the differences of diseases dependent upon climate are to be especially taught, is evident. The North must have her own schools, and the South and West must have theirs. Already the Pacific coast constitutes a fourth climatic division which must have its schools. The great emporia of these grand divisions of the country must become the centres alike of commerce and education.

THE WEEK.

A CASE of death from the carelessness of a druggist is reported in the city. The following is the report:—

On Saturday afternoon Coroner O'Keefe concluded an inquest at No. 230 Sullivan street, on the body of Catharine Madden, a child three years of age, who died on Wednesday evening. It appeared in evidence that the child had been ill for some time, and was attended by Dr. Kelly. On Wednesday the Doctor left a prescription for the child, embracing in its composition a quantity of quinine. This prescription was put up by John G. Manning, a druggist living at No. 139 Bleeker street, who carelessly substituted morphine for the quinine ordered. The consequence was that a single dose killed the child. The Jury rendered a verdict of death through the carelessness of the apothecary. Coroner O'Keefe thereupon ordered Mr. Manning to find bail in the sum of \$1,000 to answer any bill which the Grand Jury might find against him, and to stand committed until the bail was procured.

To prevent such errors, it has been suggested by the English journals that druggists should keep all potent articles, or such as are called poisons, in colored bottles, or

those having a peculiar shape, with narrow necks, or of an angular fluted figure, in order that in obtaining them, the attention should necessarily be directed to their peculiarity. The suggestion is a valuable one, and deserves the attention of our druggists. Mere labels are not sufficient, as is proved by the frequently recurring accidents like that above recorded. A recent number of the *Lancet* contains a long list of cases of accidental poisoning by these mistakes. Among them we notice strychnine given instead of santonine; laudanum instead of black draught; colchicum wine instead of antimonial wine; tincture of aconite instead of tincture of chiretta; laudanum instead of tincture of rhubarb. Many instances are also recorded in which a peculiarity of construction of the vial would have arrested attention, and saved much suffering, and oftentimes life.

It might be supposed that an event like the visit of the Prince of Wales to our city, which has filled the daily papers to overflowing with matter of the most exciting popular interest, might furnish at least a paragraph for a medical periodical wherewithal to commemorate the great occasion. But for such a purpose it was productive of only a single incident, which, however, was of so much importance to the public that we should be guilty of inexcusable indifference if we let it pass unrecorded. The following item in a morning paper alludes to what the future historian of New York should regard as the most noteworthy event of the week, if not of the year:—

"At the special request of the Mayor of the city, the City Inspector will, on Wednesday night, clean the following streets through which it is reasonable to suppose that Baron Renfrew will pass during his visit here: Fifth avenue, Waverley place, Broadway, Astor place, Lafayette place, Bowery, Chatham street, Second avenue, Twenty-third and Forty-second streets."

THE medical department of our public charities labors under a most serious disadvantage. We refer to the political and consequently unstable character of the appointing power. Aside from the utter incompetency of the governing Boards of these institutions to make judicious selections of medical officers, the constant liability of a change of their political complexion, and the compulsion of the medical aspirant to office to assume a political character as a necessary prerequisite, tends to render the medical government insufficient, and degrade the medical officer to a level with the common political hack. The public charities of this city afford many melancholy instances of improper appointments from this cause. The Ohio Penitentiary has recently undergone a change in its medical management which also forcibly illustrates the truth of this remark. An educated and competent physician has been removed by the Governor, and his place filled by an irregular practitioner, doubtless entirely unqualified for the position.

BELLEVUE HOSPITAL is to have a library. At a recent meeting of the Medical Board an appropriation was made, a librarian appointed, and rooms set apart for this purpose. A well selected library will be a most valuable acquisition to this institution, now the resort of such a large number of medical students. We may add, also, that through the liberality of the commissioners, a Microscopist is to be appointed to the Hospital staff, who will be furnished with all the necessary apparatus for conducting microscopical researches.

Progress of Medical Science.

OPHTHALMOLOGY.

By HENRY D. NOYES, M.D.

Contributions to the Knowledge of Defects of Refraction and of Accommodation. (Beiträge zur Kenntniss der Refraktions- und Accommodations-Anomalien.) By F. C. DONDERS. *Archiv für Ophthalmologie*, Bd. VI. Abth. I. S. 62-105.—In this paper Professor Donders (of Utrecht) continues the subject of an earlier number of the Archives, giving it a wider range, and embodying some original views and discoveries. The paper is continued in the succeeding part of the Archives, and is illustrated by several diagrams. The whole deserves complete translation as an important addition to ophthalmic knowledge, and a condensation, in order to do it justice, must be rather lengthy. His first section is given to the "definition and division of defects of Refraction," in which he proceeds:

For clear and distinct perception of an object two conditions are necessary. First, a well defined and inverted image must be formed upon the anterior surface of the layer of rods and cones (Jacob's membrane) of the Retina; second, the local impression thus excited must be transmitted to the fibres of the optic nerve, be imparted to the brain, and then in reversed direction be projected outwards.

By this twofold inversion the projected image will correspond to the object; we aver that we see the object when it is really only the projected Retinal image which stands before our eyes. All defects of vision arise from non-fulfilment either of one of these conditions, or of both combined. If projection of the picture outwards is disturbed, whether by anomalies in the retina, in the optic nerve, or in the brain, then the disease will belong to the domain of amblyopia or amaurosis. On the other hand, if no Retinal image is formed, it must be either because the rays are too much diffused in the interior of the eye, or because there are opacities of the media. Lastly, the image may not fall exactly upon the layer of rods and cones of the Retina, while the object shall be within the usual range of clear vision, and when there are no deviations from the normal curvature of the surfaces of the media:—when this is the case there must exist faults of refraction or of accommodation.

Defects of sight may therefore be divided into three principal classes (speaking of vision with only one eye), viz. amblyopia, opacities, defects of refraction or of accommodation.

To the last group I now direct attention. "The distance of distinct vision" is something often spoken of, and great pains have been taken to determine it with precision. But in the normal eye there is more than one "distance of distinct vision:" there is a point nearest to the eye to which it can accommodate, and there is another point most remote: every point lying between these limits becomes each for itself a "distance of distinct vision." If the nearest point and the remotest point are known, the scope or breadth of accommodation can be obtained by the method which I indicated in a former paper.* Let r represent the distance from the eye, of the remotest point, let p represent the distance of the proximal or nearest point,—then the breadth of accommodation will be given by the formula: $A = \frac{1}{p} - \frac{1}{r}$.

In an ideal eye the remotest point will be at an infinite distance, that is the eye will be able to bring parallel rays to a focus upon the layer of rods and cones. But few eyes correspond to this ideal. Very often parallel rays are brought to a focus in front of the retina, so that a distinct retinal picture is obtained only of objects at a finite dis-

tance. The rays coming from these objects when they enter the eye, are divergent. If the accommodation is taxed to the utmost, parallel rays not seldom come to a focus behind the layer of rods or cones: to form a sharp retinal image in such a case, the rays in striking the eye must be convergent. The former condition is called myopia, to the latter condition I apply the name Hypermetropia.

If eyes be considered in their relation to the farthest point of distinct vision, they will fall into three classes, viz. 1st, the normal or emmetropic, which can be adapted to parallel rays; 2d, the myopic, adapted only to divergent rays; 3d, hypermetropic, adapted to convergent rays.

In this classification based upon the remotest point of clear vision, is contained the fundamental principle of Prof. Donders's paper. Previous classifications have taken the nearest point, or rather the so called "distance of distinct vision," as the point of departure. The radical objections to this system the Professor states to be that the distinctions must be arbitrarily drawn; that there can be no distinction founded upon the different directions of the rays of light in entering the eye, whether parallel, divergent, or convergent; that the power of adjustment makes the distance of the nearest point of distinct vision a variable quantity. In accordance with the classification hitherto received, myopia and presbyopia are regarded as antagonistic: because in the former, objects must be brought close to the eye, in the latter they must be held at a distance. Upon closer study this antagonism will be found to be specious; it is apparent, not real. Myopia depends upon abnormal anatomical structure of the eye; presbyopia does not; it is the result of increasing age in every emmetropic eye. The myopic eye possesses the full power of accommodation; defect of this power is the very essence of presbyopia. Myopia depends upon the abnormal position of both the farthest and nearest points of vision; presbyopia upon the abnormal situation of the nearest point. Finally, that these two conditions are not opposed, although diverse, is evident because they may co-exist in the same eye, as in cases where clear vision is confined within the limits of fourteen and twenty inches; here the furthest point is too near, the nearest point is too far from the eye. The inexactness of the old distinctions became more palpable when the condition which I call hypermetropia became better understood. It has been formerly called hyperpresbyopia, as if it were a higher grade of presbyopia. That this is an error in language and of conception appears when it is remembered that an eye is often "hyperpresbyopic," but presbyopic in only the least degree; that in "hyperpresbyopia" the power of accommodation may be in full vigor, while in presbyopia it is always enfeebled.

I therefore adopt the distinctions of myopia and hypermetropia. In the former case the focus of the dioptric system is in front of the retina; in the latter case, it is behind the retina; in the normal or emmetropic eye it is exactly in the layer of rods and cones of the retina.

In the second section of his paper, which is upon myopia, Prof. Donders adverts to the fact that slight grades of myopia, namely $\frac{1}{16}$ th and $\frac{1}{32}$ th, are much more common than are usually supposed. For example persons may see well at two, three, or four feet, but cannot read letters an inch high at fifteen to twenty feet. Such cases have caused much perplexity. They may all be described by the formula $\frac{1}{p} (r \text{ being the furthest point})$. The same is true of the condition designated "myopia in distans." Different conditions have been christened with this term, viz. by Kerst the above cases of slight myopia, by Frommüller a case of hypermetropia, by Von Graefe some rare cases of spasm of the muscles of accommodation. The term "myopia in distans" may be well dispensed with; the two former conditions fall under totally different categories; the last may be simply and correctly called spasm of accommodation.

The third section is upon Hypermetropia: a morbid condition, formerly not recognised at all, or else misunderstood.

* *Archiv für Ophth.* Bd. VII. S. 801.

The higher grades have been described by Von Graefe. By Stellwag von Carion it was considered a higher degree of presbyopia, and he makes several categories, as facultative, relative, and absolute hyperpresbyopia. But it has not been hitherto observed that hypermetropia in a mild form is widely prevalent, and that it underlies a disease long described by the various names, hebetudo visus, asthenopia, lassitude oculaire, impaired vision, weak-sightedness, etc.

The definition of hypermetropia was given above. It exists so soon as the eye can see to a distance farther than the normal limit; so soon as it can be adjusted to convergent rays; when the focus of the dioptric system lies behind the retina. Objects in terrestrial nature radiate light in divergent pencils: objects at an infinite distance send out parallel rays. The eye has no need to be adapted to convergent rays. The hypermetropic eye therefore enjoys a useless faculty, while it has lost much that is useful. (To the oculist hypermetropia does become useful; he is thus enabled to examine the eye of a myopic patient with the ophthalmoscope without using a concave lens to obtain the upright image. From the myopic eye rays are reflected in convergent pencils. But this advantage will not compensate the inconvenience of being obliged to use glasses for all ordinary vision.)

The grade of hypermetropia can be easily expressed. It is the distance to which the eye is capable of seeing beyond the normal limit. It is found, by giving the person the strongest positive glass which he can use, and yet discern objects at an infinite distance with distinctness. If he can do this with glasses $+ \frac{1}{2}$, $+ \frac{1}{3}$, $+ \frac{1}{4}$, his hypermetropia will be $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, or more accurately, $\frac{1}{16}$, $\frac{1}{9}$, $\frac{1}{4}$; one inch being deducted for the distance of the glass from the optical centre of the eye.

This appears simple enough, and yet a difficulty interposes. I soon learned that all such persons have acquired the habit of exerting their accommodation to the utmost, even when looking at a distance, and that they continued to do this, although the occasion were removed by giving them positive glasses. Upon repeated trials, they would put on glasses which were stronger and stronger, but after all the grade of hypermetropia would be estimated too low. With young persons whose power of adjustment was vigorous, this difficulty was felt in the greatest degree. They acquire the habit of putting forth their full ability of adjustment at every effort of sight. In older persons, in the very young, and in those enfeebled from any cause, the difficulty is not so great.

To obviate this source of error, I have recourse to mydriatica. A solution of atropine, three to four grains to one ounce of water, will paralyse not only the sphincter of the pupil, but also the whole apparatus of accommodation, and then the true focal point of the dioptric system can be ascertained. The best object for testing the sight is a small luminous point carried to a great distance. The effect of artificial mydriasis upon the distant vision of a normal eye is hardly noticeable—sometimes a glass of $\frac{1}{4}$ th to $\frac{1}{8}$ th will improve the vision, very rarely will $\frac{1}{2}$ th or $\frac{1}{3}$ th be accepted. Upon myopic eyes the effect is not perceptible: with dilated pupils they do not choose glasses any weaker than they used before. In hypermetropic eyes the difference is often astonishing; with unparalysed accommodation, they prefer glasses $\frac{1}{2}$ th, $\frac{1}{3}$ th at first, afterwards $\frac{1}{4}$ th or $\frac{1}{5}$ th; after the use of atropine, they often require $\frac{1}{4}$ to see distant objects: this will be the true measure of their degree of hypermetropia.

Section 4 opens the subject of *Asthenopia* in its relations to hypermetropia. The usual symptoms are briefly detailed. They are too well known to need repetition. Prof. Donders quotes Mackenzie, who says that it is probable that the seat of asthenopia is to be found in the organs of accommodation. He and other ophthalmologists recognised in the disease the speedy exhaustion of the power of adjustment, and that convex glasses would partly or wholly remove the painful symptoms. But Mackenzie disapproved of the use

of convex glasses, and the idea wholly escaped him, as well as others, that an intrinsic defect in the construction of the eye lay at the bottom of the trouble.

In truth, the manner in which the disease appeared was such as to keep this conjecture at a distance. Up to the 16th, 20th, or 25th year, the persons had enjoyed good vision. Gradually the asthenopic symptoms come on: close application of the eyes becomes painful—repose restores their functions. Could anything else be imagined than that this disease is really developed at this period, and must not the cause be sought in excessive application of sight?

"Impaired vision from overwork" is the title under which Mr. White Cooper describes it. But this explanation overlooks the fact that thousands strain their sight even worse than these persons, without entailing upon themselves the same symptoms; and, per contra, that these symptoms sometimes appear in children, who have not overtasked their visual functions at all. Since the same cause does not produce the same effects, the explanation must be sought in some special predisposition. I soon convinced myself that not only the predisposition, but the very cause consists in a degree of hypermetropia. The hypermetropia is held in abeyance until the 16th, 20th, or 25th year, because until then the power of accommodation is strong enough to overcome it. When the adjusting power begins to fail, the latent hypermetropia becomes manifest, and soon asthenopia declares itself. The occasion of the asthenopic symptoms is persistent close application of sight; the cause of the symptoms is the hypermetropic structure of the eye. To prevent confusion between cause and occasion, take this illustration: A person climbing a mountain becomes wearied; the immediate occasion of weariness is the exertion of climbing; the cause of his fatigue is the feeble power of his muscles compared to the weight of his body. The disproportion between his muscular power and the weight to be carried always exists, even when he is not climbing; it is the effort of climbing that brings on the fatigue. This disproportion may, by proper exercise, be so much reduced that he will not become fatigued until after repeated excessive efforts. The relation between hypermetropia and asthenopia is exactly similar. I assert that whenever asthenopia is found, hypermetropia is almost never wanting. To demonstrate it, drop a strong solution of atropine into the eyes, and then try positive glasses upon distant objects. I have found hypermetropia in every one of the last 100 cases of asthenopia which have occurred to me; in the greater number of them the hypermetropia was considerable. There are, however, other conditions besides asthenopia, in which use of the eyes upon near objects is painful: such as congestions, especially in myopic persons, beginning amblyopia, granular conjunctivitis, neuralgia of the eyes; but other symptoms will distinguish these sufficiently. The only affection bearing much analogy to asthenopia is one studied by Prof. Von Graefe, viz. a slight paresis of the internal recti muscles that interferes with the proper convergence of the visual axes in near vision. These cases are, however, very unfrequent; among the above 100 cases not a single instance of insufficiency of the recti interni came under my notice.

After having thus proved that hypermetropia is the cause of asthenopia, and that the symptoms of the latter become evidenced whenever the adjusting power begins to grow weaker, in Section 5th the "relative breadth of accommodation" is discussed. The degree of convergence of the visual axes has been long known to have an important influence upon the range over which the eyes will be able to adjust themselves. The same degree of convergence will be accompanied by very different breadth of accommodation in normal or emmetropic eyes, in the myopic, and in the hypermetropic eyes: these differences depend upon habit and exercise. To make comparisons between the various kinds of eyes, in reference to their range of accommodation, when influenced by differing degrees of convergence of the visual axes, Prof. Donders has arranged his observations in diagrams. The peculiarities of the emmetropic, the myopic, and the hypermetropic eye, are thus clearly presented. To

go into details is impossible without the assistance of the diagrams.

A few facts will show the interest which attaches to these investigations. Myopic eyes can converge to an angle of 24° and bring into play only about $\frac{1}{10}$ th of their accommodation, while at that angle its remotest point is $5\frac{1}{2}$ inches. The normal eye at 24° convergence, exerts $\frac{1}{10}$ th or $\frac{1}{11}$ th of its power of accommodation, its remotest point being at 10 or 11 inches. The hypermetropic eye at 0° , or with parallel axes, must already forcibly exert its accommodation, because the focus of rays of light is at a point 24 inches behind the retina. That the rays produced would meet at 24 inches behind the retina is shown by the needed convex glass which is + 24. If now atropine be used, the produced rays meet at 8 inches, i. e. a glass of 8 inches focus is needed. This shows that the person habitually exerts $\frac{1}{4} - \frac{1}{11} = \frac{1}{44}$ of his accommodation to bring parallel rays to a focus upon the retina even with + 24. When by bringing the object closer to the eye higher angles of convergence become necessary, a disproportionately greater effort of adaptation must be made, as, for example, at 24° about one-fifth of the entire ability of adjustment. Besides this the adjusting muscles acquire the habit of being thrown involuntarily into a state of tension, upon every attempt to see distinctly. As would be expected, the limits of accommodation, that is, the situation of the near and remote points, after a time become altered. Yet in spite of this change of position, the power of accommodation at last becomes insufficient, and then asthenopia supervenes. Prof. Donders asserts that the power of accommodation begins to grow weaker in such persons even at the 15th or 20th year.

The normal eye may be put into the condition of the hypermetropic, by putting on a glass $-\frac{1}{4}$. A young person will even then be able to see clearly, by increasing his effort of adjustment $\frac{1}{4}$ for every convergence of the visual axes. To this he is perfectly competent. If, however, his accommodation become restricted, then symptoms of asthenopia will occur.

(To be continued.)

MATERIA MEDICA AND PHARMACY.

By EDWARD R. SQUIBB, M.D., OF BROOKLYN.

Carbonate of Lithia in Uric Acid Diathesis.—Many of the journals, and some recent works upon gout and rheumatism, have of late again brought forward the salts of lithia as especially adapted to the treatment of these diseases; and the increased facilities for obtaining lithia appear to give a practical force to the suggestions to its use far beyond that of the time when it was first suggested by Dr. Ure, about the year 1843. Its claims as a remedy appear to depend entirely upon its chemical character, and upon the fact that it is found in those natural mineral waters, though in very small proportion, which have been most successfully resorted to in the uric acid diathesis. The chemical points upon which its alleged value is supposed to depend are, first, its low equivalent number, namely, seven. From this circumstance comes the fact that fifteen parts of lithia will saturate as much of any acid as thirty-one parts of soda, or as forty-seven parts of potassa. Secondly, that it has a strong and predominant affinity for uric acid, and forms, with uric acid, the most soluble of the salts of that acid. By this predominant affinity its salts easily decompose the urates of soda and lime, and form more soluble and therefore more easily eliminated urate of lithia. The chain of reasoning in the premises is as follows: Certain idiosyncrasies and habits of life are attended with the formation and separation of uric acid in the living economy:—that a continuance of such habits of life produces gout and some forms of rheumatism, with a deposit of uric acid and insoluble urates about the joints and in the various tissues of the economy:—that the uric acid and urates accumu-

late and become hurtful in some proportion to their fixed and insoluble character:—and, finally, by supplying a powerful base, which is required in very small proportion, and which will not only combine with the free uric acid, but will decompose all its salts, and form other salts that are more soluble and therefore more easily eliminated. The reasoning appears to be good, and the grounds afforded to be sound; and the fact that under the internal use of salts of lithia, the uric acid deposit disappears from the urine, sustains the argument. But it must be borne in mind that the formation and separation of uric acid and urates is the effect and not the cause of gout and rheumatism, and that the modification of uric acid and urates after their formation, does not necessarily influence their production; and that therefore this lithia as a remedy, even upon the best reasoning, only renders a troublesome symptom, or expression of the diseased condition more manageable. In this way, however, it may undoubtedly accomplish much; and again, in establishing and preserving a peculiar alkaline character of the fluids of the economy, it may well exercise a curative and preventive influence. It is precisely this effect which the waters of Carlsbad, Ems, Vichy, etc., appear to produce, all of which are alkaline, and all contain a small proportion of lithia salts. But the whole of the rationale in this, as in many other cases, is too exclusive and too chemical; and the experiments of Dr. Garrod and others upon portions of cartilage infiltrated with deposits of urates, should have only the force which pure chemistry can lend them, for they are all far from being conclusive evidence of what occurs in the living fluids and tissues. When we see the vital forces interfering with such laws as those of gravity and hydrostatics, it is not consistent with either truth or logic to assume that the laws of chemistry are less modified. M. Trousseau, however, on a late occasion, before the Imperial Academy of Medicine, goes far into the opposite extreme when he says that "In the field of practical medicine the chemists have not only no camp, but hardly enough ground to raise a tent upon," to which M. Bouillaud very happily replies, that although Trousseau may have gone far into the extreme opposite to that which he so condemns, yet, as Pauline had too many virtues not to become a Christian, so M. Trousseau has too many intellectual virtues not to admit chemistry to its legitimate moderate ground.

In conclusion, carbonate of lithia seems to have sufficient claims to entitle it to a fair trial in the uric acid diathesis, and Drs. Ure, Garrod, Williamson, and others, deserve credit for bringing it forward, and for their experiments upon its reactions and effects. Carbonate of lithia is a white colorless powder, having a strong alkaline taste, not unlike that of bicarbonate of soda. It requires about 100 times its weight of water for solution,—that is, a fluid ounce of water will hold about four grains in solution. For internal use, however, the solution should be more dilute. In the presence of free carbonic acid it is much more soluble, and carbonic acid water forms a good, but by no means indispensable, vehicle for it. A good formula for its administration is to dissolve twenty grains of it in a pint of water, or of carbonic acid water, and to give of this a wine-glassful three or four times a day, diluted at the time of taking to half a tumblerful or more, and to be taken after meals. It is said to produce no observable physiological effect, nor to cause any inconvenience, but it immediately diminishes the uric acid deposits in the urine. Dr. Garrod has used as much as four grains three times a day when a prompt effect was desired; and when a larger amount of alkali was desirable, he associates potassa or soda salts with it. He states that under its use gouty attacks are less frequent and less severe, and gouty deposits are removed.

The Stereoscope.—It is said that Sir David Brewster, in inquiring into the history of the stereoscope, finds its fundamental principle was well known even to Euclid; that it was distinctly described by Galen 1,500 years ago; and that Gambatista Porta had, in 1599, given such a complete drawing of the two separate pictures as seen by each eye,

and of the combined picture placed between them, that we recognise in it not only the principle but the construction of the stereoscope.—*Chemist and Druggist*.

Gun Cotton as a Filter for Corrosive Liquids.—M. Boettger, in the *Polyt. Notizblatt*, 1860, No. 7, p. 966, recommends, and doubtless originates, as far as the publication is concerned, the use of gun cotton as a filter for acids, solutions of nitrate of silver, chloride of zinc, permanganate of potassa, etc. This substance has been used for such purposes in this country for some years past, and though not concealed, has not happened to be published. It has been pretty freely mentioned among chemists, and is therefore probably used in a number of laboratories here. Who originated the practice here, it would now be difficult to ascertain, and it matters the less since M. Boettger is beyond question entitled to the credit of the original observation, since he is the first to publish the facts. The writer is under the impression that he first received the idea from Prof. J. Lawrence Smith of Louisville, Kentucky, some two years and a half ago.

Examination of the Seeds of Ricinus Communis.—The Society of Pharmacy of Turin offers a prize of 500 livres for an answer to the following propositions:

"To determine the quantity and quality of the proximate principles contained in the seeds of ricinus communis.

"To make known the cause of the marked difference which is observed in the mode of action upon the animal economy between the seeds and the expressed oil of the seeds of the ricinus. And, to indicate, if possible, the respective action of the divers principles isolated.

"A specimen of the principles which the author may be able to isolate, should accompany the memoir.

"The memoir, written in either Italian, French, or Latin, should be sent before the 31st of December, 1861, to M. Chiappero Francesco, General Secretary of the Society, at Turin."—*Boucharlat, Répertoire*.

This interesting subject is understood to be offered to universal competition, and the honor as well as the prize for the essay are very well worth having. The plant is largely cultivated in our middle and western states, and the oil forms a staple commodity. The honor of this essay is therefore quite within the reach of our scientific men.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, OCT. 17TH, 1860.

JOHN WATSON, M.D., President, in the Chair.

DISCUSSION ON TETANUS.

THE PRESIDENT, DR. JOHN WATSON, read a paper on tetanus, of which the following is an abstract:—Tetanus may originate as a primary or secondary disease, the former being the idiopathic, the latter the traumatic form. Idiopathic tetanus is rarely seen in this city, though it is not uncommon in certain localities. Traumatic tetanus is not always due to mechanical injuries, but may result from burns, ulceration from frost-bitten limbs, chemical irritants, congenital syphilis. Trismus nascentium, so frequent in warm climates, has never been seen. Tetanus, then, as seen in this city, is assignable to some pre-existing local irritation, which affects innervation of the excito-motory apparatus. The severity of the attack bears no relation to that of the wound, a slight scratch, or abrasion of the skin, having in his observation induced a fatal attack. Tetanic symptoms may supervene immediately after the injury, or be delayed for weeks, even until the wound is healed. An angry wound, however, or an ulcer in which suppuration has been arrested, is more liable to be the precursor of an attack.

When tetanus is about to occur, no remedies addressed to the wound, such as removal of the cause, amputation of the limb, &c., can arrest it. Tetanus belongs to the class of self-limiting diseases; it rarely lasts beyond the fifth week, and, when general, seldom subsides before the close of the third week. When about to terminate in health its order of retrocession is rarely the same as its onset, nor is its apparent subsidence always permanent. The author entered minutely into the symptomatology of the disease. In fatal cases death is apt to occur within four or five days, either by asphyxia, spasm of the heart, or exhaustion. Where death occurs during a paroxysm it is more often due to the former cause. Several illustrative cases were adduced by the author, in one of which he performed tracheotomy with only temporary relief. Spasm of the heart as a cause of death in tetanus is denied by some writers, but Dr. Watson reports a case in which the fatal result was attributable to that cause, the muscular fibres of that organ being found hard and rigid like cartilage. A case was also given, fatal after amputation of the arm for its relief. In regard to the mortality from this disease, Dr. W. believes that excluding cases in which the employment of powerful remedies has been excessive, and those cases fatal from the severity of the original injury, not less than one-third, or perhaps one-half of those judiciously treated, recover. Of thirty-three cases, of which he has memoranda, occurring in private and hospital practice, and with every grade of injury, there were eleven recoveries. These successful cases were reported at length, and illustrate the author's mode of treatment, which is assafoetida, wine, and fluid nourishment, or, in other words, support, and guarding against spasm. The assafoetida is administered by the rectum, or in a watery emulsion.

Dr. A. H. STEVENS, in reference to the relation of cold as an exciting cause of tetanus, referred to a case of fissure in ano which he had operated upon several years ago. The gentleman lived in the country, and the operation was performed on Saturday, with the understanding that the patient should remain in town until the following Tuesday. Contrary to directions, however, he started for home on the afternoon of the same day, and being exposed during the night to a draught of air in his state-room in the steamboat, caught cold, which in the course of a few days eventuated in tetanus. The treatment consisted of opium, mild enemata, and the free use of beef tea. The case was successful in its issue. Dr. S. further remarked, that he looked upon a person who was suffering from tetanic paroxysms in the same light as one who was being subjected to hard labor; hence the attendant copious perspiration, and consequent exhaustion. He did not think that the necessity for a mild course could be too strongly urged. In conclusion, he expressed his entire concurrence with the views set forth in the paper.

Dr. J. MARION SIMS remarked that the late Dr. Drake established the fact in regard to the traumatic tetanus and hydrophobia, occurring in the valley of the Mississippi, that they bore an inverse ratio to each other; that as you go south attacks of the former become more frequent, while the tendency to hydrophobia increases. So far as the progress of the disease was concerned, all the cases that Dr. Sims had seen were self-limited in character, and also self-curative. He further stated that according to Curling the cases terminated hebdomadally or at the multiple of an hebdomadal period, and that if the disease lasted over a week there was a probability of recovery. Dr. S. advocated the sustaining treatment, but stated that he had seen but very few recoveries take place in the south, where he believed the disease was more fatal in its tendency than elsewhere. He referred to a case which occurred to him fifteen years ago at the south, of a negro who was seized with tetanus in consequence of a punctured wound in the foot from a nail. Having on consultation of authorities seen division of the nerve recommended, he determined to perform such an operation upon the post-tibial. This being done, marked amelioration of the symptoms followed, and the patient

finally recovered. In regard to *Trismus Nascentium*, he stated that he had published a paper upon that subject, in the *American Jour. Med. Sciences*, some time in 1848, illustrative of his peculiar views of that disease; that he considered it a disease of centric origin by mechanical compression of the medulla oblongata. The first few cases were of such a character as to induce him to believe that the pressure was occasioned by the occipital bone; subsequent observations, however, established the fact that lateral pressure might produce it equally as well. At that time also he advanced some theoretical views as based upon his first few cases, which however he was since compelled to retract. He stated that in parturition the occipital bone was depressed and overlapped by the two parietals at the lambdoidal suture, for the purpose of accommodating the diameters of the head to those of the pelvis; and that if the bone was allowed to retain its position there was always danger. It is a disease that very seldom occurs after the ninth or tenth day, but is most usual during the first three or four days of existence. Contrary to the generally-accepted opinion, it is liable to occur in the coldest climates. In conclusion he referred to the following case, occurring in the practice of Dr. Griscom. The child had suffered from the following symptoms during thirty-six hours: borborygmi; greenish passages from the bowels; constant sleeplessness; inability to such; moaning; and slight spasmodic twitches. On examination of the cranium, the peculiar abnormal relation already referred to between the occipital and parietal bones was noticed; the child was placed upon its side in such a way that the weight of the head rested along the edge of the os frontis, and in about a minute after the child became perfectly quiet, and slept four hours. An hour after waking all the unpleasant symptoms had subsided, and the little one was able to take the breast.

Dr. McNULTY remarked that it was a scientific maxim that, like causes under like circumstances must of necessity produce like results. This being the fact, if this rule was applied to tetanus, it would be found that the disease was not the result of local injury, inasmuch as very few of the vast number who received such injuries suffered from any tetanic spasms. He thought that it was necessary to suppose in those cases where persons did suffer from the disease, that a tetanic diathesis existed, and that the wound was merely the exciting cause.

Dr. WATSON remarked that Dr. McNulty took very singular views of the subject. According to such a theory it would be as well to suppose that hydrophobia did not depend upon the bite of a dog, because every one bitten did not suffer from the disease.

Dr. J. P. BATCHELDER stated that in every case of tetanus that had come under his observation, the *first* symptom which showed itself was a *stiffness of the muscles of the leg*. He thought that such would be found to be the fact in all cases, if the patients were interrogated with reference to that point. In his experience, if the patient survived the first week with a pulse not over one hundred, he would get well.

Dr. H. S. BULKLEY recollected being told by Dr. Knight of a case of idiopathic tetanus.

Dr. M. G. PORTER referred to a case of idiopathic tetanus which occurred to him four or five years ago. The patient was ten years of age; the attack was a very severe one, and recovery was the result of a free use of brandy and beef-tea. From the absence of evidence to the contrary, he considered the case as unquestionably idiopathic in character.

Dr. J. FOSTER related the history of a case of tetanus which seemed to have been caused on two successive occasions by the administration of bi-chloride of mercury.

THE first Medical Charity of South Africa, supported by voluntary subscriptions, is about to be established in the shape of a Dispensary at Cape Town for the relief of the sick poor.—*Med. Times and Gazette*.

Correspondence.

AUTOPSIES ON PERSONS FOUND DEAD.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In the published deposition of Drs. Sands and Finnell, in the case of Fanny White, the following singular statement appears:

"The appearances just described were so decided and characteristic as to leave no doubt in the minds of all present that the deceased died from cerebral apoplexy. No further examination of the body was made, inasmuch as we had already discovered what, in the opinion of all parties who witnessed the autopsy, was the real undoubted cause of the death. When an individual is found dead with his throat cut, his heart ruptured, or with a musket-ball at the base of his brain, it is not generally considered necessary to search for poison in the contents of the stomach and intestines, and for a similar reason, no such inquiry was instituted in the present case. Having ascertained what was regarded as the true cause of death, a certificate was rendered in accordance with the facts observed."

It is not my intention to question the cause of death in this case, as stated by these gentlemen, but to call attention to the very erroneous principle which they seek to establish in this statement, that when a sufficient cause of death is found it is not generally considered necessary to search for poison in the contents of the stomach and intestines. Neither of these gentlemen can be familiar with the duties of a medical man called to investigate the cause of a sudden death.

Let us refer to our standard authorities. Beck says (vol. ii., p. 11, last edition), of an examination, "We must not desist because we suppose that the cause of death is perfectly discovered in one or the other cavity; all of them should be inspected." The learned editor, Prof. Gilman, adds:—"I attended an inquest some years ago, when the cause of a very sudden death, occurring when no person was present, was confidently believed to be disease of the heart, under symptoms of which the patient had labored for years; valvular disease, sufficient in the opinion of all present to cause death, was discovered. Yet on continuing the dissection, prussic acid was found in the stomach, and the case thus proved to be one of suicide."

Taylor (p. 183) says: "In making an inspection of the body, the state of the *stomach* should not be overlooked. Death may have been apparently caused by violence, or yet really be due to poison." He gives several examples to prove that poisons are sometimes found in the stomach when there were other sufficient causes of the death discovered.

Wharton and Stillé (p. 541) remark:—"And, moreover, the importance of a general and careful examination of all the organs of the body should not be forgotten; for, notwithstanding the immediate cause of death may be evident, it is still advisable to be sure that there was no cause of death in any other part. Although there may be no suspicion of poisoning, the stomach should be opened. In a case often referred to, a girl died while her father was chastising her for stealing, and on account of the marks of violent treatment upon her body, it was supposed that this had caused her death. On opening the stomach, however, it was found to be inflamed, and contained a white powder, which was proved to be arsenic. The girl had taken the arsenic in dread of her father's anger, upon detection of the theft; she vomited during the flogging, and died in slight convulsions."

LEX.

October 19.

FOREIGN CORRESPONDENCE.

Letter from DAVID P. SMITH, M.D.

EDINBURGH.

August 20, 1880.

YESTERDAY evening I went out to Morningside Asylum for the Insane. It is a very extensive establishment with large pleasure grounds around it, and accommodates about four hundred patients. Every exertion is made to induce cheerfulness. Every Wednesday evening there is a ball in one of the large halls. One was in progress at the time of my visit, and it was very interesting to see the pleasure and interest taken in it by all the patients, even by those who, I was informed by the superintendent, were among the most violent. Music here seemed in truth to exorcise the evil spirits. In answer to my interrogatories I was informed that morphia did more good than anything else in acute mania, and that blood-letting was entirely discontinued. When at the Royal Infirmary I related a case of strangulated hernia which occurred to me some time since, where I was sent for to operate some eighteen hours after strangulation had occurred. I learned that the taxis had been repeatedly tried by the physicians in attendance. As I cut down upon the sac coagulated blood rolled out from under the knife, and the moment I opened the sac a clot popped out, striking me in the face. There was no fecal odor, and no further discharge of any kind, and no gut in the internal ring which readily admitted my forefinger. The patient died at the end of forty-eight hours. The incision was nearly healed, although drawn together by merely two silver sutures. I could obtain no examination. Mr. Syme and Mr. Spruce both said that it was no doubt a case in which fatal mischief had been done by the taxis. Mr. Syme related a case in which a gentleman ruptured his own intestine, in the effort to return it.

Sept. 10.—Last week Mr. Syme excised the shoulder-joint of a young girl by making one long incision from just above the acromion down the humerus, about five inches. Through this incision the head of the humerus was easily protruded and sawn off, and also part of the acromion removed. Mr. Spence amputated the thigh of a child for scrofulous disease of the knee-joint, making the anterior flap much longer than usual, and cutting the posterior flap nearly perpendicularly to the bone. The advantages of this method are, that when there is no tendency to displacement of the flap, the cicatrix is entirely behind and out of the way of pressure, and the short transverse cut through the posterior muscles gives far less occasion for the use of ligatures than the ordinary oblique incision.

Sept. 11.—To-day Mr. Syme removed a medullary tumor involving the whole of one and about half the other upper maxillary bone. One straight cut was made from between the eye-brows down the bridge of the nose, and through the upper lip. This allowed of the clearance of the whole anterior surface of the growth. The bones were then cut through with very large and powerful cutting-forceps. After the removal of the tumor, and closure of the wound, remarkably little deformity remained. I have witnessed the trial of acupressure in two cases. In one, the removal of a breast, it perfectly succeeded; in the other, an amputation of the thigh, after protracted trial, the insufficiency of the pins to restrain the hæmorrhage necessitated ligatures. The radical cure of hydrocele is obtained by Mr. Syme in a most simple manner; and, as he remarked, it is one of the most satisfactory operations in surgery. After emptying the hydrocele by the trocar, two drachms of Tr. Iodine is thrown into the sac, the canula withdrawn and the scrotum violently shaken, so as to bring the Tr. Iodine in contact with every portion of the sac. I have applied to-day Lewis H. Sayre's apparatus for morbus coxarius to a lad under care of one of the best practitioners here. The course of the case will be watched with much interest. I hope soon to be able to give more interesting reports of medical and surgical matters here. Just now, it being vacation, there are but few clinics.

MEDICAL JOURNALS OF THE UNITED STATES, WITH THEIR NAMES, PLACES OF PUBLICATION, ISSUE, NUMBER OF VOLUMES YEARLY, AND PRICE.

American Jour. of Med. Sci., Phila. Pa.,	quar. 2 vol., \$5 00
American Jour. of Insanity, Utica, N. Y.,	quar., 1 v. 3 00
American Medical Gazette, New York,	monthly, 1 v. 2 00
American Med. Monthly, New York,	monthly, 2 v. 3 00
American Medical Times, New York,	weekly, 2 v. 3 00
Atlanta Med. and Surg. Jour., Atlanta, Ga.,	mon., 1 v. 3 00
Boston Med. and Surg. Jour., Boston, Mass.,	w'kly, 1 v. 3 00
Charleston M. Jour. and Rev., Charl., S. C.,	bi-mo., 1 v. 4 00
Chicago Medical Journal, Chicago, Ill.,	monthly, 2 00
Chicago Medical Examiner, Chicago, Ill.,	monthly, 2 00
Cincinnati Lancet and Obs., Cincinnati, O.,	mon., 1 v. 3 00
Cincinnati Med. and Surg. News, Cin., O.,	mon., 1 v. 1 00
Cleveland Med. Gazette, Cleveland, O.,	monthly, 1 v. 2 00
Columbus Rev. of Med. and Surg., Colum., O.,	bi-mo., 2 00
Georgia Med. and Surg. Encl., Sandersville, Ga.,	mon., 2 00
Jour. of Mat. Med., New Lebanon, N. Y.,	mon., 1 v. 1 00
Kansas City M. and S. Jour., Kan. City, Mo.,	bi-mo., 1 v. 2 00
Louisville Medical Journal, Louisville, Ky.,	3 00
Louisville Med. News, Louisville, Ky.,	monthly, 2 v. 3 00
Maryland and Virginia Medical Journal,	
Med. Jour. of N. Carolina, Edenton, N. C.,	bi-mo., 1 v. 3 00
Med. News and Library, Philadelphia,	monthly, 1 v. 1-00
Med. and Surg. Reporter, Philadelphia,	weekly, 2 v. 3 00
Nashville Jour. M. and S., Nashville, Tenn.,	mon., 2 v. 3 00
Nashville Med. Record, Nashville, Tenn.,	mon., 1 v. 2 50
N. Orleans M. and S. Jour., N. Orleans, La.,	bi-mo. 2 v. 5 00
N. Orleans Med. News and Hos. Gaz., N. Orl., La.,	mo. 5 00
North American Medico-Chir. Rev., Phila.,	bi-mo. 2 v. 5 00
Oglethorpe Med. and Surg. Jour., Savannah, Ga.,	bi-mo. 2 00
Ohio Med. and Surg. Jour., Columbus, O.,	bi-mo. 1 v. 2 00
Pacific Med. and Surg. Jour., San Francisco, Cal.,	mo. 5 00
San Francisco Med. Press, San Francisco, Cal.,	quar. 2 00
Savannah Journal of Medicine, Savannah, Ga.,	
Southern Med. and Surg. Jour., Augusta, Ga.,	mo., 1 v. 3 00
St. Louis M. and S. Jour., St. Louis, Mo.,	bi-mo., 1 v. 2 00
St. Joseph Jour. M. and S., St. Joseph, Mo.,	bi-mo., 1 v. 1 50

Medical News.

EPIDEMIOLOGICAL RECORD.

RACINE CO., WISC.—Dr. Sawyer writes: "There has been in this vicinity an epidemic of diarrhoea, an epidemic of scarlatina of the very mildest type, generally, with one or two exceptions. An epidemic of dysentery in Racine, 13 miles east, while in Milwaukee they have had whooping-cough very badly, a large number having it the second time. Whooping-cough prevailed here, too, during the summer."

LA HARPE, ILL.—Dr. F. A. Smith writes:—"We have many and severe cases of typhoid fever in this vicinity."

Prof. AUSTIN FLINT has returned to New Orleans to give his annual course of lectures in the New Orleans School of Medicine. This school is in a most flourishing condition, and now numbers in its Faculty, Professors Flint, senior and junior.

W. R. WHITEHEAD, M.D., the newly appointed Professor of Clinical Medicine in the New York Medical College, recently graduated at the Faculté de Médecine de Paris, on which occasion he presented and sustained a thesis on the following subject:—*De l'Ordre et de ses Variétés*. He was attached to the Russian Army, as a military surgeon during the war of the Crimea.

THE lectures of Dr. ECHEVERRIA, late Resident Physician of the London Hospital for paralytics and epileptics, on *Tubercular Diseases of the Bones*, were well attended, and

elicited warm commendation. They will soon appear in the columns of the MEDICAL TIMES.

JOHN ORDRONEAUX, M.D., Prof. of Medical Jurisprudence in the Law Department of Columbia College, is a candidate for Assembly in Queens county, N. Y. Prof. O. has a legal as well as medical education, is a brilliant speaker, and would not only honor his constituency, if elected, by an honest and faithful guardianship of their interests in our Legislature, but would prove a most capable representative of the medical profession.

RICORD.—This eminent surgeon has retired from the post of Surgeon to the Hôpital du Midi. He is a native of the United States, having been born at Baltimore on the 10th of December, 1800. The regulations of the hospitals of Paris now exclude from the office of surgeon all persons who have attained the age of sixty; Ricord would, therefore, have been compelled to resign at the end of the present year, a position which he has held for nearly thirty years. He took occasion, in his farewell address, to review at length his past labors before a large audience of friends and pupils. His farewell address was received with the most marked demonstrations of sympathy and regret.

NEW PUBLICATIONS.—A Medical Student of San Francisco, Cal., has undertaken a translation of Prof. SCANZONI's work on Obstetrics, and promises an early completion of his labors. He has taken out a copyright of his translation. A work on the Diseases of Females is noticed as about to appear from the pen of Prof. HOGGE, of Philadelphia. Lindsay and Blakiston, of Philadelphia, announce the preparation of a work on Medical Biography, edited by Prof. GROSS, Dr. O. C. GIBBS, of Frewsburg, N. Y., proposes to issue a *Year Book of American Medicine*.

M. LUCA has made a chemical analysis of the liver of a patient who died with atrophy of the pancreas. He found glycogenic matter in the liver; showing thereby that the disease of the pancreas had not sensibly interfered with the glycogenic action of the liver. He also found on examining a mixture of the different substances, solid and liquid, taken from the right cavity of the heart, and from the inferior vena cava near the diaphragm, that the mixture contained no free fatty acids, and that the fatty matter was not decomposed. This fact may be explained by the disease of the pancreas, in accordance with the function given to that organ by M. Bernard.—*Medical Times and Gazette*.

M. VELPEAU says that many plans have been proposed to obtain obliteration of arteries without ligature, but almost all of them have been abandoned; in his opinion acupuncture will share the same fate. In two cases in which he tried it, inflammatory symptoms necessitated the removal of the needles. Might not M. Velpeau just as well refuse to amputate a limb, because the operation is sometimes followed by accidents of this kind?—*Medical Times and Gazette*.

TO CORRESPONDENTS.

J. S.—The vaccinating instruments figured in the last number, may be obtained of Dr. Laines, House Physician of the Eastern Dispensary.

Liquors for Medicinal Purposes.—"You have noticed the fact that our druggists retail bad liquors by the glass to customers, as freely as the keepers of rum shops, and of as poor quality. Now, I wish to add that, in my experience, pure liquors for medicinal purposes cannot be obtained at any drug store in this city. The worst, and most villainously adulterated specimens of liquor, that I have ever seen, have been obtained from druggists. We are in great need of a depot where pure liquors for the sick can always be obtained.

N. S., Oct. 23, 1890.

M. D.

Treatment of the Placenta.—"I wish to inquire, through the medium of the corner of your paper devoted to correspondents, what is the general practice in treating the placenta? According to my early instruction, and believing it according to the natural processes I have practised waiting for its delivery by the efforts of nature. Being engaged in country practice, I have often been greatly inconvenienced by the delay. I am aware that some remove the placenta, at once, by force, but I am not informed as to the general results of such practice. My prejudice in favor of what I conceive to be the natural process is so strong, that I have never as yet interfered, except in cases of flooding."

P. A., Oct. 16, 1890.

L. B.

C. G.—You cannot expend five dollars to better advantage than in subscribing for the New Sydenham Society Publications. Address C. F. Heywood, M.D., 66 20th street, N. Y.

Obstinate Chordee.—"I am greatly obliged to 'Senex' for his suggestion of 'some more serious lesion than that which follows gonorrhea,' in the case which I published. I now learn, on careful inquiry, that my patient was first treated by a quack, who, in passing a catheter, thrust it so forcibly into the urethra as to cause great pain, and a copious discharge of blood; considerable swelling and inflammation followed, and the symptoms of the formation of an abscess, subsequently breaking and discharging into the urethra, were well marked. To this cause, I have no doubt, is to be attributed the obstinate chordee which is now so painful a symptom. I have advised him to bind the penis down, as suggested by 'Senex,' but he thinks it excites an erection."—J. C. O.

COMMUNICATIONS have been received from:—

Dr. W. H. MUSSEY; Dr. A. C. VAN DUYN; Dr. L. BARTLETT; Dr. J. M. MINOR; Dr. J. C. MONTAGUE; Dr. E. W. MILLS; Dr. BARR; Dr. GILLILLAM; Dr. J. G. OSTON; Dr. H. B. RANSOM; A. ELWELL & Co.; Dr. J. L. ABERNETHY; Dr. C. RYND.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 18th day of October to the 26th day of October, 1890.

Deaths.—Men, 86; women, 103; boys, 118; girls, 167—total, 414. Adults, 189; children, 225; males, 304; females, 210; colored, 5. Infants under two years of age, 160. Among the causes of death we notice:—cholera-infantum, 8; infantile convulsions, 18; croup, 16; diphtheria, 4; diarrhoea, 15; dysentery, 8; scarlet fever, 18; typhus and typhoid fever, 15; pertussis, 5; consumption, 50; small-pox, 5; dropsy of head, 18; infantile marasmus, 20; pneumonia, 23; albuminuria, 9. Classification: digestive system, 91; nervous, 80; respiratory, 123.

The number of deaths compared with the corresponding weeks of 1886 and 1890, and of last week, was as follows:—

Week ending October 26th, 1890,	400, Dec. 54
Week ending October 23rd, 1890,	366, Inc. 48
Week ending October 18th, 1890,	385, Inc. 29

Oct.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amo of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.
14th.	30.00	.30	43	38	48	3	4	N.E.	10	.7
15th.	29.94	.08	43	38	43	7	12	W.	10	
16th.	30.00	.07	45	40	51	7	11	S.W.	25	.
17th.	30.02	.04	55	49	60	7	11	S.E.	2	
18th.	30.06	.05	47	47	56	5	6	N.E.	9	.71
19th.	30.09	.06	53	46	62	5	10	N.E.	97	
20th.	30.00	.09	52	47	57	4	6	N.E.	10	

REMARKS.—14th, storm till 5 A.M. of the 15th, which day was variable, with light winds; 16th, 17th, and 18th, mostly fine, with light winds, A.M. and calms, P.M.; 19th, wind, fresh all day; a N.E. rain storm commenced at evening which lasted through the 20th.

MEDICAL DIARY OF THE WEEK.

Monday, Oct. 29.	{ CITY HOSPITAL, Surgery, Dr. Peters, half-past 1 P.M. BELLEVUE, Obstetrics, Dr. Macready, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Oct. 30.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, half-past 1 P.M.
Wednesday, Oct. 31.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Bulkley, half-past 1 P.M. BELLEVUE, Surgery, Dr. Gouley, half-past 1 P.M.
Thursday, Nov. 1.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. CITY HOSPITAL, Surgery, Dr. Peters, half-past 1 P.M. BELLEVUE, Medicine, Dr. Elliot, half-past 1 P.M.
Friday, Nov. 2.	{ CITY HOSPITAL, Dr. Parker, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, 1½ P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Nov. 3.	{ BELLEVUE, Drs. Parker and Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garriah, 1 P.M. CITY HOSPITAL, Medicine, Dr. Smith, half-past 1 P.M. EMIGRANTS' HOSP., WARD'S ISLAND, Dr. Carnochan, 3 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

DR. CARNOCHAN will hold a clinic at the State Emigrants' Hospital, Ward's Island, every Saturday afternoon at 3 o'clock.

Original Lectures.

LECTURES ON
STRICTURE OF THE URETHRA,
PRELIMINARY TO THE
CLINICAL COURSE ON DISEASE OF THE GENITO-
URINARY ORGANS.

DELIVERED AT THE UNIVERSITY MEDICAL COLLEGE.

BY
W. H. VAN BUREN, M.D.,
PROFESSOR OF ANATOMY, ETC.

LECTURE II.

AFTER the preliminary consideration of the anatomical structure of the urethral walls which occupied our last lecture, we are now ready for the question, What is the meaning of the term *stricture*, as applied to the urethra? We can hardly answer with propriety that it is a narrowing of the canal, for I have already shown you that, when at rest, its walls are always in contact; it means rather *any alteration in them which would impair their normal dilatibility*. Thus the inability to pass water which occasionally occurs after full doses of opium, or under the influence of hysteria, or after a severe surgical accident, although relievable by the introduction of a catheter, depends generally upon disturbed innervation of the bladder, and not upon any impediment to the dilatibility of the urethra. To constitute stricture, then, there must be either spasmodic contraction of the muscular tissues surrounding the mucous membrane of the canal, or positive obstructive alteration in that membrane itself.

The causes which occasion this alteration in the urethral walls, likely to give rise to stricture, are inflammation and its consequences, and mechanical and chemical injuries. Of inflammation of the urethra, the poison of gonorrhoea is by far the most common cause; and nine-tenths of the strictures we encounter in practice owe their origin to this source. Blows upon the perineum, bruising or lacerating the urethra against the unyielding parts by which it is covered in during its passage beneath the arch of the pubes, give rise to strictures notorious for their unyielding character, and illustrate the effect of mechanical injuries in producing the disease. They are known as *traumatic strictures*. I have encountered cases caused by a fall astride of a beam, a trestle, by falling with one leg through a hole in the sidewalk, and by the kick of a horse. Syphilitic ulceration sometimes occasions stricture, especially at the orifice. I have also met with two cases of stricture arising from congenital malformation of the urethra, in one of which I was obliged to perform the perineal section. Finally, I believe that stricture in the anterior portion of the canal resulting from the chemical action of too strong injections, especially of nitrate of silver, employed to arrest morbid discharges, is more frequent than is generally supposed.

In the present we shall confine ourselves to the study of strictures of the urethra resulting from gonorrhoeal urethritis, and we shall consider, first, how they are produced.

A gonorrhoea which is neglected, or injudiciously managed, tends to advance along the urethral mucous membrane from its original seat near its orifice, and as it extends backwards and increases in intensity it affects more and more profoundly the structure of the membrane. At first this is merely turgid with blood, exquisitely sensitive, and yielding a copious purulent discharge. Losing its epithelium, the urine comes in contact with the naked membrane, and stretches it at each evacuation of the bladder. That this is a new source of irritation is obvious from the acute smarting which accompanies the act. The inflammation becoming more intense, extends to the submucous layer of connecting and muscular tissues, and often to the *corpus spongiosum urethrae*; in place of purulent discharge, in these deeper

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tissues inflammatory exudation takes place into their interstices. The nutrition of the mucous membrane being thus interrupted, it becomes altered to such an extent that, when the acute inflammation has subsided, it is no longer able to reproduce a sound healthy epithelium, but remains indefinitely as a morbid surface, similar to that of a cicatrix upon the external integument; and this being constantly irritated by the urine for the contact of which it is unfitted, usually furnishes a discharge, which is known as *gleet*; in some cases there is undoubted ulceration of the membrane. Meanwhile cell development takes place in the deeper tissues which have been the seat of inflammatory exudation, and ultimately fibrous transformation. The tissues thus altered, like the capsule of Glisson in a cirrhotic liver, contract indefinitely, and, when they surround the whole circumference of the urethral canal, render its walls rigid and undilatable by the fluids which traverse it. The morbid changes which I have thus rapidly sketched may be arrested at any period of their progress by judicious treatment, and, before attaining the extent I have described, months, and perhaps years may have elapsed. If arrested early, the consequences of the inflammation may no doubt be entirely repaired, and the canal restored to its normal condition; but if much time shall have elapsed, if the mucous membrane has been so far altered as not to recover the power of providing itself with a sound epithelial covering, or if the exudation has become the seat of fibrous transformation, a thorough and entire cure is hardly to be hoped for. If the walls of the urethra could be placed entirely at rest, the altered tissues might in time, as on the external integument, soften down and recover their normal extensibility; but the frequently repeated contact with irritating urine, and the stretching to which they are constantly subjected, prevent thorough repair, and a permanently morbid condition is established, characterized by increasing induration and tendency to contract. I have never seen fibrinous exudation (false membrane of croup) upon the free surface of the urethral mucous membrane, but upon the mucous surface of the bladder I have verified its existence in several instances. In extreme cases the greater portion of the urethral canal has presented the alterations above described, but in the great majority of instances they are confined within narrow limits, and to certain localities.

The portion of the urethra which is most liable to become the seat of serious inflammatory changes from gonorrhoea, and consequently of permanent stricture, is the commencement of its curved portion, or, to be more explicit, that part of the canal which, commencing at the front surface of the triangular ligament of the urethra, extends forwards for about an inch and a half into the bulbous expansion of the spongy portion, including, of course, the junction of the membranous and spongy divisions. This tract lies from four and a half to six inches from the urethral orifice, and it is here that the point of an instrument is most likely to be arrested by a permanent stricture. Why this part of the canal is more liable than the rest of it to become the seat of structural lesion is not easy to explain, but it is the fact. Mr. Henry Thomson, in his prize essay on stricture, the best monograph on the subject in the language, carefully examined 370 specimens of stricture in the different museums of London, Paris, Edinburgh, and Dublin, and of these 270, or 67 per cent., occupied the locality I have indicated. And this is true of traumatic strictures as well as those following gonorrhoea. The next most common locality is within two and a half inches of the orifice—in the neighborhood of the posterior portion of the *fossa navicularis*; and strictures are liable to occur, but more rarely, at any part of the spongy portion of the canal. At and behind the triangular ligament they are very rare, and in the prostatic portion they are almost unknown.

Thus, then, you may expect to find a stricture which has gonorrhoea as its cause occupying the last inch or so of the spongy division of the urethra in the great majority of instances; and for obvious reasons, strictures following kicks and bruises upon the perineum are most likely to occupy

the same locality. When two or more strictures coexist, as is not unfrequently the case, they occupy the anterior portion of the canal. In the few instances in which I have encountered permanent stricture within three inches of the orifice of the urethra, unaccompanied by any disease further back, in the more common locality, it has so happened that the stricture has always been traceable distinctly to the use of too powerful injections. These strictures, I may also remark, form more rapidly, and are met with in younger men, than those lower down, and are more apt to resist treatment by dilatation.

I have thus described, in a rapid way, the *causes, nature, pathology, and seat* of the affection known as *permanent or organic* stricture of the urethra. There are two other classes of stricture which, with this just indicated, will include all the various forms of the disease you will be likely to encounter in practice, viz. *temporary and spasmodic* strictures. In a temporary stricture there is enough inflammatory change in the urethral walls, caused by the injury or disease, to obstruct for a time the passage of urine, but it is not sufficiently serious in character to give rise to permanent alteration. Thus I have seen retention of urine in an acute gonorrhoea caused, apparently, by the simple turgid and swollen, possibly cedematous, condition of the urethral walls, yielding readily to appropriate treatment, and attended by no serious after consequences. The same has followed the passage of a rough calculus, and the ill-advised employment of Lallemand's *porte-caustique*. The essential characteristic of this variety of stricture is its transitory nature.

The *spasmodic* stricture is worthy of your attentive study. It rarely, probably never, occurs in a perfectly healthy urethra; almost always in connexion with one of the forms of stricture already described, or in consequence of injury or irritation of the lining membrane of the passage. It is seated in the muscular tissue, which, as you have already seen, surrounds the urethra throughout its whole extent, and most generally, no doubt, in the *compressor urethrae* muscle. It is caused by reflex nervous action: an irritant, either urine, or an instrument introduced into the passage, comes in contact with an over-sensitive portion of its lining membrane; its nerves of sensation convey the painful impression to the nervous centre—either the ganglia of the hypogastric plexus or the spinal cord—and the corresponding nerves of motion throw the muscular fibres which they supply into a state of spasmodic contraction, or cramp.

It is a phenomenon of very frequent occurrence—reflex spasmodic contraction of the *compressor urethrae* muscle arresting the progress of a catheter introduced into an over-sensitive urethra without extreme gentleness and care. Indeed it may almost be said to be the ordinary rule—and the entire absence of any obstruction, the exception. A little tact and practice readily surmount the obstacle, but it is generally recognisable. The sentinel is always at his post, but allows a "friend" to pass. It is not necessary that there should be inflammation in the passage to provoke hindrance from this cause; the simple morbid sensibility of the urethra from deranged sexual innervation, so commonly met with, is fully sufficient; and how often permanent strictures are falsely diagnosticated in hypochondriacal patients of this class, from this very source of obstruction to the passage of an instrument, I should be afraid to say. When we come to consider the diagnosis of stricture I shall have more to say upon this point.

Although I believe that the *compressor urethrae* is the most frequent source of spasmodic stricture, and of retention of urine from spasm, yet we must not lose sight of the unstriped or involuntary muscular fibres which underlie its mucous membrane at all parts of the canal. Whenever a portion of this membrane is the seat of permanent alteration, and consequently of increased sensibility, the muscular fibres encircling it are in a corresponding state of increased irritability, and ready to contract spasmodically on the slightest provocation. It is *their* contraction which explains in many instances the grasping of a bougie by a stricture, and they always, when not entirely destroyed by

inflammation, add more or less to the obstructive character of a permanent stricture. It is this knowledge of the nature and temper of the muscular and nervous elements which enter into the composition of the walls of the urethra that teaches us the necessity of employing the utmost gentleness and delicacy in all of our instrumental manipulations. From what I have said in explanation of the nature and characteristic features of each of the three classes of urethral strictures, you will be ready to understand that we rarely meet with either of them in a pure and unmixed form. Examples of purely spasmodic stricture do occasionally occur from remote reflex causes, as for example in children, during dentition, but a permanent or an inflammatory stricture uncomplicated by some degree of spasm is very rarely encountered; and, from a practical point of view, it would be well to assume that a permanent stricture is always complicated in a greater or less degree by both inflammation and a liability to spasm. In fact, to get rid of these complications is the first indication in their rational treatment.

Permanent strictures present themselves in a variety of forms as to the extent and nature of the actual alteration of the urethral walls which they involve.

Thus we may have a simple bridle, or a valvular fold, resembling a valve of a vein, where a few fibres of the sub-mucous connecting tissue have lost their extensibility. Here, when the canal is distended by urine, these rigid fibres start out, carrying before them a simple duplication of the mucous membrane, which losing its elasticity after repeated stretchings, remains as "valvular" or "bridle" stricture. Strictures of this sort are sometimes broken down by the first introduction of a full-sized instrument. But in the greater majority of cases the alteration is more extensive, surrounding with thickened and more or less indurated tissue either a portion, or the whole circumference, of the canal, and forming a simple narrow ring, or a wide ferrule-like cylinder around an inch or more of its length. The thickening may extend to a variable depth in the sub-mucous tissues, and may invade the erectile structure of the *corpus spongiosum*, altering its direction and attaining often the elastic and unyielding hardness of cartilage. To these various forms the terms "annular," "indurated," "tortuous," and "callous" stricture are applied.

Original Communications.

REMARKS UPON PROLONGED OCCLUSION OF THE EYE,

AS A REMEDIAL PROCEDURE.

By C. R. AGNEW, M.D.,

SURGEON NEW YORK EYE INFIRMARY.

IN November, 1859, * * * * * came under my care for hard cataract in both eyes. He was a restless subject, and had an ugly habit of spasmodically closing his eyelids upon the slightest attempt at manipulation. Although the lenses were hard, I observed that they were bulky. Hoping to reduce their size by keratonyxis so as to be enabled to extract through a small conical section, I made three needlings of the left lens during the course of three months. Finding, at the expiration of another month, that little or no absorption had occurred, I proceeded to extract from the left eye by the inferior conical section. I made the requisite section with great difficulty, and in fear of extrusion of the vitreous humor. I succeeded, however, in enucleating the lens, and was about to close the eye, when a spasmodic seizure dislodged one-third of the vitreous humor, and caused the upper portion of the iris to prolapse. I did not recognise any relation between this accident and the former needlings, since I had been very careful to make superficial abrasions of the lens, and not by to and fro motions or deep thrusting to rupture the lenticular attachments. Moreover, after I had eliminated the lens I

observed that the lenticular form was intact. After the above catastrophe, I made an unsuccessful attempt to replace the iris, and bring the edges of the conical wound in coaptation. I was prevented also from snipping off the prolapsed iris, by the restlessness of the patient and the oozing of the vitreous humor; accordingly I closed the eyelids of both eyes carefully by five strips of isinglass plaster, and placed the patient in a darkened room, in a semi-supine posture, and ordered a diet of broth and farinaceous food.

For thirteen days I watched the progress of the case without removing the plasters. For three days after the operation, considerable fluid exuded and dried upon the lids. At no time was pain entirely absent, though never very severe. For a day or so a little redness of the eyelids existed.

With the exception of an anodyne on the second and third nights, and the continued use of small doses of quinine, he took no medicine. There were two or three occasions during this period when antiphlogistics were suggested, but not employed, unless I except good diet and rest, two of the most valuable of our remedies in ophthalmic surgery.

On the 13th day, the plasters having become loose were removed, and a glance taken at the condition of the eye. The space occupied by the knuckle of iris between the edges of the corneal wound was partially bridged by lymph, and the central portion of the cornea being clear, showed a pupil drawn down, but transparent. I again closed the eyes, and kept them so for ten days more, continuing the quinine, improving the diet by the addition of meat, and allowing the patient to sit up. At the expiration of the above period I again opened the eyes, and was glad to find the eye-ball plump, the hyperemia moderate, no staphyloma, the pupil sufficiently open, though drawn down, and the patient able to see the ordinary ward objects. His eye gradually acquired strength, so that in six weeks he left the Infirmary, and when tried three months after the operation, could read with the aid of two and a half inch glasses, ordinary small type.

I have since had a somewhat similar case which promises to be equally successful, in which the occlusion was prolonged for twenty-one days. When the result is established I will send it to you for publication. Now, to some, the above may seem a rather trite recital, but I regard the principles involved as very important, and though simple, usually neglected. I can now look back upon cases of extraction in which inflammation was aggravated by a premature exposure of the eye to daylight and explorative inspection. We lose sight of the gravity of the wound we have inflicted, when we expose an eye on the fourth or fifth day to even a casual illumination. This holds true of uncomplicated extractions, and has double significance in cases of wound or prolapse of the iris, extrusion of the vitreous humor, or jagged corneal wound. Much of the suffering that extraction cases experience after the fourth day, is unquestionably due to surgical inquisitiveness, and an irresistible propensity to be doing something antiphlogistic. The grand danger after extraction is failure on the part of the corneal wound to unite, and this danger is best averted by palpebral occlusion and keeping the nutritive supply ample, and avoiding local depletion or meddling manipulations, or stimulating applications to the lids or corneal wound.

(To be continued.)

AMPUTATION AT THE HIP JOINT.

By H. A. POTTER, M.D.,

GENEVA, N. Y.

DANIEL PHILLIPS, JR., *set.* 22, of scrofulous diathesis, was injured on his heel by the kick of a horse. The result of the injury was a partial numbness of the limb, accompanied by intervals of pain, which finally became constant and severe. A German physician, the patient's attendant, did

not appear to appreciate the nature of the disease, and in 1857 I was called to the case. Upon examination, large fistulous openings were found upon the anterior surface of the tibia, about midway between the knee and ankle joints.

The patient was enfeebled and emaciated, with much nervous irritability and little appetite. Under these circumstances I advised amputation, but he consented only to a removal of the carious bone, which was accordingly done; although it was urged that amputation, and that only, would remove the disease, his friends decided that an effort should be made to save the limb. His general health was much improved for a few months, but a change occurred, attributed by the patient to a severe cold. The thigh became swollen and painful, and the femur was apparently becoming subject to the same diseased action which was already fully developed in the tibia.

In June, 1860, being again consulted, I found fistulous openings in the thigh, great emaciation, hectic, and nervous irritability, with profuse suppuration implicating the soft parts, and leaving no doubt in my mind that *now* amputation of the thigh, if not a removal of the limb at the hip joint, was imperative. The operation was consented to, and I appointed June 14th, 1860, as the day for performing the operation. At various periods during his illness since Oct., 1857, the patient had been, and was now an inmate of the "Clifton Springs Water Cure," and the operation was performed at that institution. Having applied the tourniquet and administered chloroform, the flaps were cut as low down as the diseased soft parts would permit, the limb removed, and the arteries secured in the usual manner. Upon examination the remainder of the femur was found so much affected that I at once decided that amputation at the hip joint was imperative. This was performed in the following manner: After removing the tourniquet, a free incision was made from the outer angle of the flaps, to and over the trochanter major, the muscles dissected away from the bone, the capsular and round ligaments divided, and the remaining portion of the femur removed. The stump, which was large and nearly seven inches in length, was dressed in the usual manner, and the patient made a speedy and safe recovery. I deem it essential to notice the advantages attending this method of amputation at the hip joint, a method which I have now used with success in two cases.*

First, many of the dangers from hemorrhage, inflammation, etc., attending the usual mode of hip joint amputations, are by this method avoided.

Second, this manner of operating not only gives the patient all the chances and benefits of the thigh amputation, should that meet the requirements of the case, but if necessary, we may then, with little or no additional risk, secure the advantages of amputation at the hip joint, by simply removing the remainder of the femur; thus preserving symmetry of form to the patient, and giving him a stump which he can move with force and facility, and to which an artificial limb may be applied.

PERFORATION OF THE APPENDIX VERMIFORMIS,

BY AN INTESTINAL CONCRETION—PERITONITIS—DEATH.

By A. M. VEDDER, M.D.,

PROFESSOR OF ANATOMY AND PHYSIOLOGY AT UNION COLLEGE.

J. S., *set.* 8 years, for several weeks complained of "pain in his stomach," for which his mother gave him anthelminthics, carminatives, and cathartics. During this time he was not confined to the room; he would come in from his play, complain of the pain, and then resume it; he had no diarrhoea. Sept. 15th, he was attacked with pain in the right side of the abdomen, extending high up; was chilly, and vomited. The next day the mother observed that the

* Vide *N. Y. Jour. Med. and Collat. Sciences*, New Series, Vol. xii 1854, p. 402, containing report of first case.

abdomen was much distended. On the day following I saw him, found the abdomen tense and tympanitic, great tenderness on pressure over the whole surface, and particularly over the right iliac region; pulse 130 and small; respiration frequent and thoracic; slight and painful cough. I directed a powder, containing one grain of calomel and five grains of Dover powder, to be given every three hours; and spongio-piline dipped in a hot infusion of hop-tea to be applied to the abdomen. This failing to afford relief, turpentine stupes were used. Beef tea was administered during the whole continuance of the disease. Diarrhoea soon came on and continued, notwithstanding the omission of the calomel. During the whole illness large quantities of a greenish fluid, resembling spinach, were ejected from the stomach, the vomiting always affording relief. Several days before death, marked fluctuation was felt in the right iliac region. These symptoms continued, with little variation, for ten days, when he died.

Autopsy, twenty-four hours after death.—Considerable emaciation; peritoneal covering of the intestines highly injected and dotted in many places with patches of lymph; intestines, particularly on right side and inferiorly, glued together by recent adhesions. In the right iliac region was found about a gill of pus, from which bubbles of air issued by making pressure upon the intestines. Introducing the fingers into the purulent matter, a hard substance, rough on its surface, about the size and shape of an acorn, was found, together with several small pieces of hardened faeces. On making a section of this concretion, it was found to be made up of several laminae, and contained in its centre, as a nucleus, four small seeds, supposed to have been raspberry seeds. A chemical examination showed this substance to be composed of *phosphate and a trace of carbonate of lime*, with considerable amount of amorphous matter. At the base of the junction of the vermiform appendix an opening was found through which the foreign matter had escaped into the cavity of the peritoneum, the edges of which were ragged; the mucous lining of the appendix and the mucous membrane of adjacent intestine were thickened, softened, and highly injected.

Cases are recorded of ulceration and perforation of the appendix vermiformis produced by the lodgment of cherry-stones, bits of bone and hardened faeces, but I can find no case identical with the one just described.

Reports of Hospitals.

BELLEVUE HOSPITAL.

SERVICE OF DR. STEPHEN SMITH.

EFFORTS TO STRAIGHTEN A DEFORMED LIMB BY SUBCUTANEOUS PERFORATION OF THE BONE. NITRATE OF AMMONIA AS A TONIC. EXTENSION AND COUNTER-EXTENSION IN SYNOVITIS OF THE KNEE-JOINT.

Partial Fracture of the Tibia—Extravasation of Blood, under the Integument—Mortification of the Foot—Recovery with Deformity at the Seat of Fracture—Efforts to Straighten the Bone by Subcutaneous Perforation.

A. B., set. 10, was admitted to the hospital for an injury to the left leg, occurring from a fall from a pile of lumber, some of which fell upon him. On admission, the foot and leg to within three inches of the knee were excessively swollen, the skin being as tense as it could be drawn. The sole of the foot was rounded out with the extravasated blood, and fluctuated obscurely; around the ankle there were also fluctuating points deeply discolored by the contained fluid. The great toe was black and cold, as was the extremity of the adjoining one; and this appearance extended upwards along the internal margin of the foot as high as its middle portion. At the limit of the swelling on the leg there was a lesion of the skin. The leg was

evidently bent at this point, the foot being thrown inward. No crepitus could be obtained, nor even false point of motion, and the case was decided to be one of partial fracture of the tibia with rupture of a blood-vessel and extravasation of a large quantity of blood, by which the skin was rendered so tense that the circulation was interrupted, and mortification of the extremity of the foot the consequence. The treatment consisted of free incisions wherever the blood appeared near the surface, by which a large quantity of the fluid was evacuated, and the tension considerably relieved. An effort was made by putting the limb up in a splint to straighten it, but as great pain was the result, and there was danger of still further increasing the tendency to mortification, all force was removed and the limb placed in the most comfortable position, with stimulating poultices applied to the gangrenous toes. The mortification extended until it involved all of the toes, but was finally limited at the junction of the metatarsal and tarsal bones. The process of separation was long and tedious, but it progressed so favorably, and the condition of the limb above this point was so frequently the seat of erysipelatous inflammations, that no attempt was made to hasten the cure by an operation. Nor was it thought advisable to make any efforts, by confining the limb, to remove the deformity at the seat of fracture. The foot finally separated, and the process of cicatrization proceeded rapidly, and was finally completed, leaving an excellent stump resembling very closely the stump left after Chopart's operation. Meantime the wound at the seat of fracture healed, and considerable callus was thrown out around the lesion of the bone. The incurvation of the leg was considerable, and efforts were made to overcome it by compression applied at proper points, while the limb was fixed in a suitable splint. These attempts, however, proved unavailing. Moderate efforts were then made to refracture the limb, but they were not persevered in owing to the condition of the foot.

On the completion of cicatrization, it was determined to resort to subcutaneous perforation of the bone at the seat of fracture, as recommended by Brainard of Chicago. The object of this treatment is to soften the bone by the process of inflammation which follows the perforation of its substance by a drill, and thereby render the yielding of the bone possible upon the application of the slightest force. The operation consists in drilling the bone in several directions, which may be done through a single, or at most two openings in the soft parts, and thus not only weakening the shaft by the perforation of its substance in several places, but much more by the subsequent inflammation. The operation was accordingly performed, the soft parts being opened at two points, and the shaft of the tibia perforated in several directions. The external portion of the shaft, the seat of the fracture, and of the recently formed callus, readily broke down, but the internal portion was penetrated with difficulty. The limb was kept quiet, with cold water dressing, for about a week, one of the openings for the perforator having suppurated, when an attempt was made to straighten it by the dressings applied. To accomplish this object, a strong, unyielding splint was placed upon the internal margin of the limb, resting upon pads placed upon the upper and lower extremities of the tibia; at the seat of fracture a tourniquet was applied around the splint and limb, having its pad and screw resting directly over the fracture upon the external surface of the limb. This apparatus acted upon both the extremities of the tibia, pressing them outwards, while at the point where the bone had been perforated, the screw of the tourniquet acted directly and powerfully inwards. The force that could thus be applied was very great, and direct, as the fibula had been thrown somewhat behind the point of application of the pad of the tourniquet. At first the pressure was moderate and at intervals, the object being to bend the bone gradually if softening had occurred. Considerable impression was thus made upon the limb, the deformity having markedly diminished. But sufficient effect was not gained; the patient became quite intolerant of the apparatus, even for

a short time. It was determined, therefore, to place the patient under chloroform, and resort to immediate straightening of the limb. On applying all the force which could be brought to bear the bone yielded slightly, but perceptibly, and the deformity was still further diminished, but not overcome completely. A subsequent effort was made to refracture the bone, but was desisted from before it yielded, in fear of doing too much violence to the limb. The patient left the hospital with his leg somewhat incurved, but as useful apparently as the other.

Although the attempt to bend a bone by this method of weakening its texture was in this case not entirely successful, still it seems plausible and is worthy of a thorough trial.

THE USE OF NITRATE OF AMMONIA AS A TONIC.

[Reported by WALTER COLES, M.D., Senior Assistant Surgeon.]

THE attention of the profession has been recently called to the nitrate of ammonia as a means of introducing an increased quantity of oxygen into the system. A female is now under treatment in the second surgical division, in whom the nitrate of ammonia has been used with the most satisfactory results. She had suffered for a long time from disease of the knee-joint, when the limb was amputated in the thigh by Dr. A. B. Mott, in the early part of August. For the first four days after the operation the patient was in a most precarious state, and apparently liable to sink at any moment. She was freely stimulated with brandy and milk punch; but still she continued to decline. Suppuration from the stump was most profuse, and it seemed to be making little or no progress towards reparation. Quinine, carbonate of ammonia, and chlorate of potash, were each in turn tried with no better success. At the suggestion of Dr. Barker, they were now stopped, and nitrate of ammonia, grs. xv., three times a day, administered, while the brandy and ale were continued in small quantities. From the moment the nitrate of ammonia was begun, the stump assumed a more healthy appearance, and her general health began to improve. She expressed herself in the most decided terms in regard to the relief derived from it. The amendment has been gradual but steady ever since.

TREATMENT OF SYNOVITIS OF THE KNEE-JOINT BY EXTENSION AND COUNTER-EXTENSION.

An Irish domestic, set. 31, came into the Hospital on the 9th of July with inflammation of the knee-joint. She was of healthy constitution, and had had neither rheumatism nor syphilis. Her disease was pronounced synovitis of the knee-joint. Her sufferings were such as to render it imperative to put the limb up securely on a double inclined plane and apply counter-irritants freely. These means, however, were of no avail. On the 24th of July the limb was put on a straight splint and constant extension made by means of adhesive strips and weights attached to the foot; the contact of the bony surfaces of the tibia and the femur being thus obviated, while the limb is also kept at rest. The relief from this plan of treatment was most marked and immediate, gentle counter-irritants having been kept up at the same time.

At the end of one month the apparatus was removed, leaving the limb nearly free from pain and inflammation, and capable of some degree of spontaneous motion.

BROOKLYN CITY HOSPITAL.

TWO CASES OF VARICOCELE.—OPERATION WITH THE ECRASEUR.

[Reported by A. D. WILSON, M.D., House Surgeon.]

Case 1.—E. B. Seaman, set. 25, was admitted in the service of Dr. ENOS, Aug. 7, 1860, with varicocele on the left side. The varix, which had existed for about a year, was apparently confined to one vein, which was much enlarged. Six months ago the patient had gonorrhoea. August 11, he was etherized and operated upon.—The veins were care-

fully separated from the vas deferens, and raised up with the investing scrotum. A small trocar was then run through the skin between the veins and the cord. The ecraseur was put over the parts thus raised, beneath the trocar, and gradually worked till the skin and enlarged veins were cut off. Twenty minutes were occupied in the process. No blood was lost. Six silver wire sutures were applied, and allowed to remain seven days. But a small portion of the wound united by first intention. The wound gradually healed by granulation, and on the 10th of Sept. the patient was discharged cured.

Case 2.—G. S., seaman, healthy, admitted May 29, with secondary syphilis and varicocele; the latter appearing three weeks before admission, after an attack of orchitis and a sudden cessation of a gonorrhoeal discharge. Aug. 29. —Was operated on by Dr. ENOS in the same manner as Case 1, except that *ten minutes* only instead of twenty were taken in the operation. A slight amount of hemorrhage followed. The wound was brought together by silk sutures, and water dressings were applied. Sept. 1.—Dressing and sutures were removed. There was considerable pain and swelling around the wound, but both passed away in two or three days. Wound granulated from the bottom, and the patient was in due time discharged. There was no general disturbance of the system.

Remarks.—The advantages which this mode possesses over many others which have been devised for the radical cure of varicocele are: 1. It is easily done. 2. The obliteration of the veins is complete. 3. It is safe, never followed by suppurative phlebitis (M. Chassaignac). 5. The redundant scrotum is curtailed by the removal of a part of its substance, a desirable object being thus obtained.

Clinical Record.

UNIVERSITY MEDICAL COLLEGE.

PROF. A. C. POST'S CLINIC.

October 27, 1860.

SIMPLE HARE-LIP; INFLAMMATION OF BURSA OF LEFT-KNEE; ECZEMA IMPETIGINODES; FRACTURE OF INTERNAL CONDYLE OF OS BRACHII; EPITHELIOMA; SYPHILITIC ULCER OF FOOT.

CASE 1. Simple Hare-Lip.—The patient, a male child 11 months old, was presented for an operation. On examination of the gums they were found to be very much swollen, caused by the pressure of four or five teeth which were about to protrude. The gums were lanced. Dr. P. remarked, that a simple incision was sufficient for an incisor tooth, but for a molar, a crucial cut was preferable.

CASE 2. Inflammation of Bursa of Left-Knee.—B. C. set. 35, suffered from trouble of left knee-joint for the past three years, and it does not seem to have arisen from any injury. Last June an opening appeared over the front of the patella, discharging a thin watery fluid: there was no increased swelling at the time, nor has there been present any other evidence of inflammation of the joint proper. The opening still exists, and a probe passed into it enters a small cavity immediately beneath the skin. The walls of this cavity were stimulated by the application of nitric acid, and pressure was recommended by means of adhesive plaster. The Professor pointed out the necessity of care in the use of such appliances, in order that venous congestion might not ensue from the complete encircling of the limb. If it is found necessary to apply compression around any part of the limb, a bandage should be carefully applied from the distal extremity to that point.

CASE 3. Eczema Impetiginodes.—O. C., girl, set. 6 years, has an eruption over the entire scalp and both ears. This eruption is often liable to be confounded with porrigo favosa, which is contagious, and is the result of the ravages of a vegetable parasite. The distinction between these two

forms of disease is quite plain; in the latter there is always to be recognised a peculiar smell resembling that from mouse dung; and besides the scab is dry, while in the variety of eczema under consideration, it is moist. The hair was ordered to be kept closely cut, the part poulticed, and cleanliness carefully attended to. An ointment composed of the following ingredients, was also prescribed: "creasot. ℥ xx., adipis ʒi.

CASE 4. Fracture of External Condyle of Os Brachii.—This patient, aged 6 years, was first presented to the class a week ago, with the above injury. The fracture being recent, a rectangular tin splint, well padded, was applied. On examination at present, the parts are found in a good position. As soon as the process of reparation has fairly commenced, which will be in the course of a couple of weeks, passive motion should be resorted to, and gradually increased in extent until the motions of the joint are perfect. If this precaution is not taken ankylosis may result.

CASE 5. Epithelioma.—J. R., female, aged 80. Six months ago she noticed an excrescence on the second phalanx of the index finger of the right hand, which she regarded as a wart. It was poulticed, and sundry other applications made, but without avail. The growth presented every appearance of epithelioma. The part was thoroughly cauterized with nitric acid. Dr. P. stated that it was an unusual location for that disease.

CASE 6. Syphilitic Ulcer of the Foot.—D. M., set. 57, has an ulcer with hardened edges and sloughy base situated between the fourth and little toe of right foot, and which has been of three years' duration. The ulcer was cauterized with nitrat. argenti, and hydrarg. bichlorid. was ordered internally in one-eighth of grain doses.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROF. PARKER AND MARKOE'S CLINIC.

ABSCESS OF HEAD OF TIBIA; CUTANEOUS SCROFULA; SYNOVITIS OF KNEE-JOINT; DYSPEPSIA; PROLAPSUS ANI.

DR. MARKOE.

CASE I.—Abscess of Head of Tibia.—The patient, a female, 14 years of age, was admitted about ten months ago to the N. Y. Hospital, suffering from an abscess of the head of the left tibia. The limb was much drawn up, and there was present a sub-acute inflammation of the knee-joint. Two or three small sinuses existed, which communicated with a cavity in the bone. An operation was decided upon, and accordingly performed by Dr. Markoe. The cavity, when laid open, was found of sufficient size to hold an egg. The wound granulated from the bottom finely, and at present it has nearly closed up. By the use of proper extending apparatus, the contraction of the tendon is so far overcome as to allow her to step upon her limb. On examination with the probe, a small portion of necrosed bone was discovered and removed. Dr. Markoe stated that the case was originally one of abscess of the bone, and that no sequestrum was found; he accounted for the appearance of necrosis by supposing that some portion of the bone had either been splintered off during the operation, or had been exposed to the air afterwards, and had thus taken an inflammation which resulted in death.

The relaxation of the knee-joint was so recent, that a proper support to the part was advised.

CASE II.—Scrofulous Ulceration upon Leg and Forehead.—This patient was a female, 25 years of age. Dr. Markoe remarked that the case was one of cutaneous scrofula, a disease which was apt to attack persons about the age of puberty. The affection seems to consist in the production of indurations under the skin, reaching down to the bone. These deposits are most generally located about the forehead and tibia, where they break down, leaving indolent ulcers. The disease is frequently confounded with periostitis, because it occurs over the bone thinly covered with

flesh. It may involve the periosteum secondarily, but it never produces exfoliation of bone to any extent. The prognosis is favorable under a proper tonic course.

DR. PARKER.

CASE III.—Synovitis of Knee-joint.—A. B., a scrofulous girl, 4 years old, had been suffering for two years past with the symptoms of synovitis of knee-joint. She is unable to bear her weight upon the limb, and by crowding the two articular surfaces together, pain is produced. Dr. Parker remarked that the first treatment of importance for inflamed joints was rest; and accordingly advised for the patient a slightly flexed posterior splint. In order to give support and stimulation to the inflamed part, a nicely adjusted ammoniacal plaster was prescribed. The twentieth of a grain of the bichloride of mercury, with tinct. cinchona, was ordered as an internal remedy, together with plenty of fresh air, good food, etc.

CASE IV.—Dyspepsia.—E. K., set. 30, a shoemaker, has suffered for a year or two past with all the distressing symptoms attendant upon dyspepsia, eructations, palpitations, gastralgia, dizziness, low spirits, and constipation. A powder formed of the following ingredients was ordered to be taken shortly after each meal: Subnit. bismuth gr. x.; pulv. cubebs gr. v.; and bicarb. soda, gr. v. A change of occupation, with out-door exercise, was insisted upon.

CASE V.—Prolapsus Ani.—A. C., a child 4 years of age, had been suffering from the above disease for the last three months. Previous to its appearance the patient had an attack of bowel complaint. The danger of this disease consists in the fact that the portion of mucous membrane which protrudes is by neglect very apt to become strangulated in consequence of the contraction of the sphincter upon it. In treating the case the bowels must first be regulated so that the child has a passage once every twenty-four hours, and when at stool the patient should be directed to stand, or simply lean against a hole on a plane of 45°. The general treatment should be tonic in character. In reducing the gut engage your finger in the end of the prolapsed portion, and gradually push the membrane in, the same as if you were putting on a glove.

NEW YORK MEDICAL COLLEGE.

PROF. CARNOCHAN'S CLINIC.

OCT. 4, 1890.

[Reported by F. O'Dowd.]

PROF. CARNOCHAN commenced his clinic by exhibiting an *Aneurism of the Aorta, fatal by rupturing into the left pleural cavity*. The person from whom the specimen was taken was a coachman, who died very suddenly while sitting on his box eating an apple. The cause of his death was explained by the rupture of the sac into the left pleural cavity. The inner surface of the sac was found to be rough and filled with coagulated blood.

The second specimen was a *Hypertrophied Heart*. It was taken from a prostitute, who died somewhat suddenly. She was probably carried off by suffocation, arising from impeded circulation and the cedematous condition of her body, and particularly of the lungs. The mitral valve, which should be delicate and transparent, is thickly studded with vegetation, thus intercepting the free flow of blood through the left cavities of the heart. The diseased valve being irregular, and having a rough surface, the blood produces a peculiar sound called *bruit de soufflé*. The gentleman from whom the specimen was received, stated that the *bruit* of the heart could be heard immediately upon entering the room.

CASE 1. Needle in the Palm of the Hand.—A woman was presented suffering from a needle in the palm of the hand. It lay across and beneath the palmar arch. Prof. C. remarked that it was a very difficult and delicate operation to find a needle in this situation; that when cutting for it, you may think you have found the needle when it is only

the fascia which has become indurated by the presence of the needle. He mentioned the case of a lady who had a needle in the foot, and in order to extract it, he was obliged to search for an hour, when he at length found it between the metatarsal bones.

CASE 2. Necrosis of Tibia.—Necrosis caused by periostitis. Prof. C. did not think it justifiable to cut away the dead bone when connected, as in this case, with a large bone, like the tibia; he would rather trust to nature, which would gradually remove it. He recommended iodide of iron.

CASE 3. Varicose Ulcer.—The pathological condition in this case is that the condition of the veins causes the solution of continuity. The patient must be kept in a recumbent position, or cicatrization will not be produced. If the patient lies down the venous circulation will be promoted and the ulcers may be cicatrized.

CASE 5. Injury of the Eye by Lime.—The eye had been poulticed by the advice of a friend, and consequently the cornea is almost entirely destroyed. Prof. C. spoke strongly against the practice of poulticing the eye when inflamed. He related an instance where he was attending a person for ectropion. On the fourth or fifth day the patient felt considerable pain in the eye, and his brother physician applied a poultice, which in forty-eight hours produced opacity of the cornea. Since Prof. C. had treated this case, he had used an astringent wash. Belladonna had been applied in order to keep the pupil dilated. Quinine was recommended as a tonic.

JOURNALS FOR OCTOBER.

AMERICAN JOURNAL OF MEDICAL SCIENCES.—October.

ART. I.—A Statistical Inquiry into the Causes, Symptoms, Pathology, and Treatment of Inversion of the Womb. By CHARLES A. LEE, M.D.—One hundred and forty-eight cases are briefly reported, from which we learn that thirty-nine cases occurred from pulling the cord by ignorant midwives, and seven from attempts to deliver the placenta; in twenty-five cases, the labor was rapid; in twenty, slow with symptoms of uterine exhaustion; in ten, the cord was short, and in several twisted round the neck; two were forceps cases, one twins, and twenty-three primiparae; twenty-three are enumerated as cases of spontaneous inversion; in one hundred and eight cases the inversion is stated to be complete, i.e. passing the body and fundus through the os, and eighteen partial; the placenta was adherent in sixty-seven cases, and came away spontaneously in fourteen; in forty-nine the hemorrhage was severe, in seventeen moderate, in eleven none, except upon removal of the placenta; seven were mistaken for polypus, and two cases of polypus were mistaken for inverted uterus, and three caused by polypus. The uterus was repositioned in fifty-two cases, seven of which proved fatal, two from peritoneal inflammation, and five from hemorrhage and exhaustion. In three the reduction is represented as spontaneous; in thirty-one cases the placenta was detached before reposition. In thirty-two cases the uterus was removed by ligature, of whom four died; in fourteen the uterus was removed by excision, and four died.

ART. II.—Experimental Researches relative to a supposed New Species of Upas. By WILLIAM A. HAMMOND, M.D., Professor of Anatomy and Physiology in the University of Maryland. **ART. III.—Aromatic Sulphuric Acid in the Treatment of Tape-worm.** By B. DARRACH, M.D., QUINCY, Illinois.—Several cases are mentioned in which the remedy was successfully employed, in doses of about three drachms in the course of twenty-four hours, largely diluted with sweetened water. **ART. IV.—On Tropical Dysentery.** By RICHARD WHITTINGHAM, M.D., Surgeon, Peruvian Navy.—During a long residence in South America, the author had many opportunities of observing this disease, and as the result of his experience divides it into five distinct varieties, distinguished by characteristic symptoms, and each requiring a peculiar treatment. (1.) Dysentery dependent upon indigesta and faeces retained in the bowels, which generally yields to the administration of full doses of purgative medi-

cines, steadily persisted in, until faecal evacuations have been procured, after which gentle aperients with a Dover's powder at bedtime, or twice a day, will suffice. (2.) Simple specific dysentery either common or bilious, in which he administers 3 ss. vel 3 i. of ipecac. in syrup and water, the patient to be kept in bed and avoid vomiting if possible; and every night and morning the following enema—B. Rad. ipecac. contus. 3 i., aquae fervent. ʒiiss., fiat infusio, cola, et adde syrupi morphiae 3 i., M. ft. enema; the draught should be repeated every morning for three days, by which time copious bilious stools are produced, when vegetable astringents with opiates complete the cure. (3.) Dysentery complicated with enteritis, in which he employs the warm bath for twenty-five minutes, and fomentations with full doses of calomel and opium followed by castor oil, and opiate injections to relieve tenesmus; when bilious evacuations appear, the case is reduced to one of simple dysentery. These cases do not bear depletion. (4.) Dysentery complicated with acute or chronic inflammation of the liver, in which local depletion is better borne than in either of the others. He directs here the whole attention to the affection of the liver, regarding the dysentery as only a symptom of the deranged state of the liver, and portal circulation. (5.) Putrid, malignant, or gangrenous dysentery, characterized by very frequent evacuations of bloody mucus, containing patches of membrane from the mucous coat of the large intestines, having the putrid odor of gangrene strongly marked, while the room in which the patient is, as well as his breath, is impregnated with a putrid odor. "The remedy which, in these cases, acts like a charm, is the extract of nux vomica combined with opium in the following formula: B. Ext. nux vomica, gr. iv., ext. opii, gr. iij. M. ft. pilulae No. iv.; one to be taken every three hours. The quantity of nux vomica should be augmented to twelve grains; that is, three grains for a dose, according to the circumstances of the case; mucilaginous drinks, and enemata of decoction of althaea, with a solution of chloride of soda, are to be administered. When the patient has passed from the state of extreme danger, his case should be treated according to the symptoms that may present themselves. I am quite ignorant of the mode in which nux vomica acts, but its administration has saved numerous individuals affected with the worst forms of dysentery from the very jaws of death. Of a very large number of cases treated on these principles in the hospital, the deaths did not average more than two per cent."

ART. V.—Some Practical Remarks on Chronic Inflammation of the Uterus. By J. S. LEED, M.D., Mendota, Illinois. **ART. VI.—The Communicability of Secondary Syphilis.** By RICHARD McSHERRY, M.D., of Baltimore, relating a case in point. **ART. VII.—On the Therapeutic Use of the Oxalate of Cerium.** By CHARLES LEE, M.D., House Physician to Blockley Hospital.—The author testified to the efficacy of this remedy not only in relieving the vomiting of pregnant women, but also in the vomiting that often accompanies phthisis, in pyrosis, hysterical emesis, and the various dyspeptic conditions of the stomach, especially atonic dyspepsia. The dose is one or two grains in pill every two or three hours, and the action was usually rapid. **ART. VIII.—Surgical Cases.** By PHILIP S. WALES, M.D., Assistant Surgeon United States Navy. **ART. IX.—Case of Extensive Compound Fracture of the Cranium—Severe Laceration and Destruction of a portion of the Brain, followed by Fungus Cerebri, and Terminating in Recovery.** By BEDFORD BROWN, M.D., Yancyville, Caswell county, North Carolina. **ART. X.—Obstetrical Cases.** By ROBERTS BARTHOLOW, M.D., Assistant Surgeon United States Army.—Case 1.—Dropsy of the amnion and discharge of the watery fluid from the vagina, and Case 2.—Anasarca and ascites occurring with, and masking the existence of pregnancy. **ART. XI.—Complete Inversion of the Uterus at four months of Utero-gestation, replaced six days after the Accident.** By E. W. WOODSON, M.D., of Woodville, Kentucky. The instrument used was a modification of Simpson's uterine sound, with a ball at the end, size of a half ounce bullet—the recovery was rapid.

American Medical Times.

SATURDAY, NOVEMBER 3, 1860.

SUICIDE IN THE TOMBS.

ABOUT a year ago our citizens were startled by the occurrence of one of the most public and reckless murders in the annals of crime. In the latter part of a summer's day, on Broadway, at an hour when this great thoroughfare is crowded with pedestrians, a gentleman drew a pistol and deliberately shot a lady, the ball taking effect in the temple, and causing death at the expiration of several days. The homicide was witnessed by hundreds, and the murderer, arrested in the very tracks when the deed was committed, acknowledged that the crime was premeditated. But to go through the farce of a trial, he had to plead the bitter falsehood, "*not guilty*"—a legal fiction that has too often thwarted retributive justice—and was accordingly committed to the tombs for *safe-keeping* to await his trial. Meantime his counsel set earnestly at work to save their client from the doom that seemed impending, and the jolly public, satisfied that in due time it would be gratified with the details of another execution, peered occasionally into the prisoner's cell to ascertain that the victim was there, and thought no more of the matter. Some nine months after the occurrence, the morning papers announced that this criminal had perpetrated self-destruction. Public curiosity was eager to know by what means an inmate of that sepulchral residence had been able to cheat the world of another hangman's tale. One of that quartette of coroners in which this city rejoices—ever vigilant on the scent of blood but never overtaking the game—forthwith set to work to unravel the mystery. Attended by a jury of his countrymen, resident in that delectable neighborhood, he proceeded with due ceremony to view the body, and determine by this enlightening process the nature of that peculiar visitation by which the prisoner had been so unexpectedly deprived of life. Whereupon it appeared that deceased had never been satisfied with the accommodations furnished him by the city, and had long ago determined to exchange them for quarters more secluded, and less exposed to public gaze. To this end he desired the transmigratory influence of a certain drug, and accordingly wrote the following recipe: "Strychnine, two shillings worth, to kill dogs." This message was intrusted to his attendant, with directions to obtain the article at a drug store. But the faithless servant thwarted his design by handing the prescription to the Warden, and thus revealed the secret purposes of his master. A close watch was now placed over his cell, and every precaution taken to prevent the prisoner's self-execution. But intent on his purpose, and undaunted by his defeat, again the tenant of the Tombs issued his orders; but this time he wrote for laudanum. The message was again intrusted to his servant, who so far fulfilled his wishes as to obtain from a druggist the required potion. But the conscience of the servant proved too sensitive for his task, and again he betrayed his trust by handing the package to the vigilant Warden. But, notwithstanding the infidelity of the servant and the vigilance of the keepers, the prisoner was

one day found dying of narcotism, and an empty phial labelled McMunn's Elixir, concealed in his room, revealed the cause of death. The ardent Coroner pursued his inquiries, intent on learning *how* the poison was smuggled into the cell, and fixing the crime upon some responsible agent. Good Dr. Covil, Physician to the Prison, is naturally suspected, but he clears himself by deposing that he never gave deceased a dose of opium. The Keepers had all maintained a vigilant watch over that particular cell, but had never seen a package passed surreptitiously through the grating, therefore they were free from suspicion. The learned Coroner summed up this mass of negative evidence, and the intelligent jury, enlightened as to their duties, retired, and after a short deliberation returned the following verdict:—

"The deceased came to his death by the administration of creasote and a preparation of opium, taken for the purpose of self-destruction. Further, the Jury would recommend the proper authorities to place wire-netting, similar to that now in use on the lower corridor, on all the cell-doors of the City Prison."

Thus stands revealed the thrice disgraceful fact, that poisons are so freely sold in this city, that a criminal lodged in prison for safe keeping to await his trial, can dictate to his waiter the kind of drug with which he will rid himself of life, and but for the treachery of the latter could obtain it. From the closely-locked and carefully-guarded cell of the murderer goes forth the written order for deadly poisons, and in large quantities; the druggist into whose hands it falls, with nimble fingers prepares the fatal draught, and asks not a question as to its destination. The prescription for strychnine would have been as quickly made up, and delivered at an ordinary drug store, as that for laudanum; though had the druggist paused and considered the purport of either, he would have read in as unmistakable characters as was written "to kill dogs," these terrible words, "TO KILL A MAN!" The remedy suggested in the verdict can by no means reach the evil. Vain are bolts and bars, wire-netting and vigilant sentinels, when the inmate of the Tombs determines upon self-destruction. He may not be able to accomplish the deed with knife, or razor, or hemp, but while druggists sell poisons as a common article of trade the weapons of the suicide are at his command. No degree of vigilance or precaution on the part of sentinels can prevent his access to them; no wire-netting is so strong or so close that they will not be clandestinely placed within his grasp. If human hands cannot convey them to him, "some bird of air" will be the messenger. If that Jury had done its duty, it would have gone directly to the source from which this class of crimes proceed. The druggist who sold the laudanum should have been charged with the violation of the law to regulate the sale of poisons, and properly proceeded against. Though the parties to this individual crime may not have been discovered, the true responsibility should have been fixed where it belongs, viz. upon the druggists who still continue to sell poisons, regardless of the law or the consequences of their acts.

THE WEEK.

ONE of our city religious papers (*The Examiner*), a few weeks ago, took to task a secular paper which claims to stand upon great primal Christian truths, for presuming, with such professions, to admit into its advertising columns

theatrical advertisements, whereby "the homes of Christian families" would be demoralized. We took occasion to call the attention of the *Examiner* to its own advertising columns, in which appear, with attractive type and illustration, the nostrums of abortionists, of slayers of the innocents, of cancer-curers, etc., etc. We deferentially asked, if it applied to itself the rule which it had prescribed for others to follow, how it, a professedly religious paper, known and confessed to stand upon "great primal Christian truths" in the distribution of its advertisements, could consent to introduce to the "homes of Christian families" advertisements acknowledged universally to be fruitful of more domestic unhappiness, and more demoralizing to the young, than all the theatres in Christendom. The *Examiner* makes no defence of its conduct, as indeed it could not, without self-stultification, but continues to be the chosen messenger of quacks, to convey to the homes of Christian families, for a certain *quid pro quo*, these fatal poisons to domestic health and morals. The secular paper, however, which was so severely rebuked, with a candor worthy of imitation by the *Examiner*, states the ground of its acceptance and rejection of advertisements, and piquantly remarks, that it has strictly refused the insertion of quack advertisements which it would be ashamed to read in a family circle. We do not desire to be hypocritical in these remarks; our only purpose is to call the attention of religious journals to the fearful responsibility which they assume when they prostitute their columns towards the furtherance of the low, vulgar, and immoral objects of advertisers of nostrums. They well know that this class of persons especially seek the columns of religious papers, because their malicious falsehoods are thus clothed with a certain respectability, and are received by Christian families as indorsed by the paper in which they appear. But however desirable it may be to have a reform in this regard, we shall not see the day when religious principles will so far triumph over the power of money, as to make professing Christians, in the daily walks of business, reject with scorn the latter, to save untarnished the former. The character of the advertisements which fill the religious papers would justify the belief that the only question which they ever stop to ask of advertisers is, "How much will you pay?" And in many instances we believe this is true. We speak advisedly. A former editor of the most prominent religious paper of this city said to a brother of the same denomination, who remonstrated with him for inserting advertisements of remedies for the cure of certain secret diseases, which he feared to have his family read, "I would publish the time and place where the devil was to preach, if I was well paid." Our attention has been again called to this subject by the announcement in one of our exchanges, that an eminent quack is about to visit our shores, who largely patronizes the press, and through its influence obtains access to the afflicted. The religious journals may thank the *MEDICAL TIMES* for having notified them in advance of the approach of this great patron of the press. That they may know something of the man, and how highly his services are valued and rewarded in the localities where he has practised, and from which he comes to this country, we will copy the following notice of him from the exchange (*British Med. Journal*, Montreal) above alluded to:

"What we have often thought would occur has occurred

at last; not that there might not have existed months ago ample enough grounds for a coroner's jury and its verdict, but that a peculiar good fortune seems to have attended Tumblety's proceedings, and secured him an exemption. His good genius has at last deserted him, and to avoid the consequences of trial before his compeers and its award, Tumblety has fled to regions unknown; in all probability to the United States, where it is not unlikely that, with the assistance of the press, which he subsidizes heavily, he will be permitted again to continue his vocation, reap handsome returns, and send more unfortunate, trusting victims to their graves. Without the assistance of the press, it is impossible that he could have succeeded as he did; and this inquest discloses the fact, that it was in consequence of seeing his advertisements, and believing in them, that the unfortunate man Portmore entrusted his life in his hands, and fell the victim of his credulity. We have not the space requisite for the details of the inquest in full. We give, however, the most important part of it, which we take from the *Morning Freeman*, a newspaper of St. John's, N. B., published on the 29th September. The jury was empanelled on the 27th, and the following is the evidence of Mrs. Portmore, wife of the deceased. Tumblety was in the room this day.

"Mrs. Portmore, wife of the deceased, swore that her husband had been for ten or twelve years suffering from disease of the kidneys and gravel. Lately he was not so unwell as he had often been, and was able to attend to his work as a carpenter; but about three weeks ago, induced by the advertisements of cures wrought by Dr. Tumblety, which were published in the papers, he applied to him, and brought home two phials, containing about a gill each of medicine that looked like water, which he got from him. He took a teaspoonful of this in water three times a day. When first he took it he cried out that 'that would burn the heart out of a man.' He continued, however, to take it for nine or ten days regularly. He always complained of the same burning sensation in the stomach after taking it, and he lost his appetite, which previously was good. On the 17th he went to Dr. Tumblety again, and brought another bottle of medicine, which looked like the former, and which he took in the same way. After he used this he vomited and grew so sick that he had to take to his bed. He could then eat nothing. She went to Dr. Tumblety to see him, and when he came to the house she charged him with having killed her husband by the medicine he had given him. She pointed to the bottles on the table, and said the medicine was there, and she meant to show it to the doctors. He said very well, and took a bottle up and smelled it, and then put it down again. He told her to apply hot water fomentations over her husband's kidneys, and she did so. He then went away, promising to send a balsam at four o'clock to settle his stomach, and immediately after he was gone she missed the bottles. She told her husband Tumblety had taken the bottles, and he said, let the villain take them. She had not tasted the medicine, and had no idea what it was. No one was in the room during this time but her husband, herself, and Dr. Tumblety. Dr. Tumblety did not send the balsam, nor did he return, but he sent word he was busy. Dr. Humphreys was then called in, and Dr. Botsford saw her husband some hours before he died. While sick at this time he did not suffer much from his old complaint, but chiefly from the pain in his stomach.

"Dr. Humphreys, who attended Portmore on a former occasion, was called in, and found him suffering from acute inflammation of the stomach. Dr. Humphreys and Dr. Botsford made a post-mortem examination on Thursday. They found the lungs sound, the kidneys disorganized, and evidence that deceased suffered from calculus or stone, but swore positively that the immediate cause of death was acute inflammation of the stomach; that this was not a necessary consequence of his old disease, and did not arise from it. They stated also, that according to the highest medical authorities, inflammation of the stomach is rarely if

ever idiopathic, or arising from natural causes, but is the result of the introduction of some powerful irritant into the stomach. They were satisfied that in this instance the inflammation was caused by some acid or other irritant introduced into the stomach, although they would not swear that it could not possibly be otherwise, and they could find no such substance in the stomach when they made the examination. They described the appearance and condition of the coating of the stomach; and the coroner afterwards stated to the jury that he agreed fully in opinion with them.

"The coroner addressed the jury at some length. The jury, after deliberating for thirty or forty minutes, found a verdict of manslaughter against Dr. Tumblety.

"We trust that this affair will terminate Tumblety's exploits in the British Provinces. It is much to be regretted that any latitude whatever should be allowed to such a fellow, or one of his kidney, for the performance of his tricks. But such is the credulity of the public, that it is ever ready to patronise any one who professes to assume something of the marvellous, and the more readily the more extraordinary or more marvellous the pretension."

MUCH has been said recently of the adaptation of the climate of the state of Minnesota to consumptives, but no direct or reliable data have yet been obtained upon which to base an opinion. The writer of the following article, the Rev. Dr. Bushnell, of Hartford, Ct., has frequently been referred to as an instance of complete recovery from confirmed phthisis, by a temporary residence in that region. It will be seen that as a scientific report it has little or no weight, for the exact nature of the pulmonary affections of the persons referred to, and even of the writer himself, are not discriminated; yet we copy it as the best contribution to the subject that we have met with, merely adding that the physicians of that state could not do a greater service than by publishing the *facts* with which they are cognizant:

I went to Minnesota early in July, and remained there till the latter part of May following. I had spent a winter in Cuba without benefit. I had spent also nearly a year in California, making a gain in the dry season, and a partial loss in the wet season; returning, however, sufficiently improved to resume my labors. Breaking down again from this only partial recovery, I made the experiment now of Minnesota; and submitting myself, on returning, to a very rigid examination, by a physician who did not know at all what verdict had been passed by other physicians before, he said, in accordance with their opinion, "You have had a difficulty in the right lung, but it is healed." I had suspected from my symptoms that it might be so, and the fact appears to be confirmed by the further fact that I have been slowly, though irregularly, gaining all the summer. This improvement, or partial recovery, I attribute to the climate of Minnesota. But not to this alone—other things have concurred. First, I had a naturally firm, enduring constitution, which had only given way under excessive burdens of labor, and had no vestige of hereditary disease upon it. Secondly, I had all my burdens thrown off, and a state of complete, uncaring rest. Thirdly, I was in such vigor as to be out in the open air, on horseback and otherwise, a good part of the time. It does not follow, by any means, that one who is dying under hereditary consumption, or one who is too far gone to have any power of endurance, or spring of recuperative energy left, will be recovered in the same manner. A great many such go there to die, and some to be partially recovered and then die; for I knew of two young men, so far recovered as to think themselves well, or nearly so, who by overviolent exertion brought on a recurrence of bleeding, and died, one of them almost instantly, and the other in about twenty-four hours; both in the same week. The general opinion seemed to

be that the result was attributable, in part, to the overtonic property of the atmosphere. And I have known of very remarkable cases of recovery there which had seemed to be hopeless. One of a gentleman who was carried ashore on a litter, and became a robust, hearty man. Another who told me that he had even coughed up bits of his lung, of the size of a walnut, and was then, seven or eight months after, a perfectly sound-looking, well-set man, with no cough at all. I fell in with somebody every few days who had come there and been restored; and with multitudes of others whose disease had been arrested, so as to allow the prosecution of business, and whose lease of life, as they had no doubt, was much lengthened by their migration to that region of the country. Of course it will be understood that a great many are sadly disappointed in going thither, and that as the number of consumptives making the trial increases, the funerals of the consumptive strangers are becoming sadly frequent. The peculiar benefit of this climate appears to be from its dryness. There is as much, or even a little more of rain there than elsewhere, in the summer months; but it comes more generally in the night, and the days that follow brighten out in a fresh, tonic brilliancy, as dry almost as before. The winter climate is intensely cold, and yet so dry, and clear, and still, for the most part, as to create no very great suffering. One who is properly dressed finds the climate much more enjoyable than the amphibious half-fluid, half-solid, sloppy, grave-like chill of the East. The snows are light; a kind of snow-dew that makes an inch, or sometimes three, in a night. Real snow-storms are rare; there was none the last winter. A little more snow to make better sleighing would be an improvement. As to rain in the winter, it is almost unknown. There was no drop of rain the last winter, from the latter part of October to the middle, or about the middle of March, except a slight drizzle on Thanksgiving-day. And there was not snow-melting enough for more than about eight or ten days to wet a deer-skin moccasin (which many gentlemen wear all the winter). The following table will show the comparative rain-fall, whether in the shape of rain or snow, for three different points, that may be taken to represent the whole country; being on the two coasts, and at St. Paul in the middle of the continent:

	St. Francisco. Inches.	St. Paul. Inches.	Hartford. Inches.
Spring.....	6	6	10
Summer.....	0	12	11
Autumn.....	8	6	10
Winter.....	10	9	10
	31	26	41

The San Francisco climate stands first, here, in dryness, it will be observed; but it requires to be noted, in the comparison, that while there is no rain-fall there for a whole six months, there is yet a heavy sea-fog rolling in every day which makes the St. Paul climate really the driest of the two. The beautiful inversion, too, of the California water-season, at St. Paul, will be noticed; the water falling here in the summer, when it is wanted, and ceasing in the winter, when it is not. It will be important for the invalid going to Minnesota for recovery, to be there in the winter, when the advantages are best. He must also be provided with the means of outdoor life. Some invalids will have nothing to hope for, except as they become residents here for the rest of their lives.—*Independent*.

DR. FRANCIS'S INTRODUCTORY.—In another column we present at length the annual introductory address at the opening of the clinical course at the Bellevue Hospital, by the President of the Medical Board, Dr. John M. Francis. For several years we have had the privilege of recording sketches of these annual addresses, always attractive by their learning and eloquence. The present effort commends itself especially by the classical and vigorous style, large and liberal views, and wise counsel.

Reviews.

ELECTRO-PHYSIOLOGY, AND ELECTRO-THERAPEUTICS; showing the best methods for the Medical Uses of Electricity.

By ALFRED C. GARRATT, M.D., Fellow of the Massachusetts Medical Society. Boston: Ticknor & Fields, 1860. pp. 708.

THIS work is a compendious treatise on electricity and its employment as a therapeutic agent. There has long been need of such a work, to enlighten the profession at large in regard to the methods of using this agent, the philosophy of its action, and the diseases to which it is especially adapted. The work is divided into ten chapters. The first three are chiefly occupied with the discussion of the history, the properties, the various instruments employed, and the method of using this agent. These chapters embrace much of general scientific interest. Chapter IV. is devoted to the subject of *electro-physiology*, and the author reviews at great length the views of authors in regard to the action of electricity upon the animal system. Chapter V. treats of the methods of employing electricity, and should be carefully studied by the practitioner, as it contains the principles upon which electricity is to be used. The author well remarks, "where electric currents are applied to the patient *without regard to the laws of their action on living tissues*, they may by chance produce, instead of amelioration or cure, an actual aggravation of the acute or chronic malady." All persons are not equally susceptible to the electric current, and therefore careful discrimination should be made of individuals. Again, disease impresses a change that requires to be understood and appreciated. There are also "certain spots along the surface of the body and limbs that give very peculiar response to the electrode in producing more ample muscle contractions without pain," a knowledge of which is essential to a proper use of this agent. These are explained at length by the author, and cannot be too attentively studied. Chapter VI. is devoted to a consideration of the employment of electricity in *hyperaesthesia*, and in *exalted nerve actions and pains*. In this chapter all the nerves which are the subject of pain (neuralgia) are separately considered, and the method of employing electricity in this affection of each nerve, is explained. Chapter VII. is occupied with the opposite condition of the nerves, *anesthesia* or *paralysis*, and the same minute rules are given for the proper use of electricity. In Chapter VIII. a third affection of the nerves, viz. *spasm*, is treated of in the same comprehensive manner. The volume closes with a lengthy discussion of the uses of electricity in *midwifery* and *surgery*. From this rapid survey of the leading topics of the work the reader will gather its chief points of interest. It has little claim to originality, but is not on that account of less importance to the practitioner. In our opinion Dr. Garratt has rendered the profession a great service in the preparation of this work, and we hope it will be widely circulated.

AN ELEMENTARY TREATISE ON HUMAN ANATOMY. By JOSEPH LEIDY, M.D., Professor of Anatomy in the University of Pennsylvania. With three hundred and ninety-two Illustrations. Philadelphia: J. B. Lippincott & Co. 1861. pp. 663.

WE cannot be said to be deficient in excellent works on anatomy. Indeed, in no department of study are there more works especially designed to aid the student. The popular work of Wilson is in the hands of nearly every student, while the recent work of Gray seemed to leave nothing to desire on this branch. A new work, therefore, and that elementary, designed especially for beginners, must

be exceedingly well prepared and adapted to the student's wants, to commend itself especially to his notice. Prof. Leidy brings to the authorship of a work on anatomy a ripe experience in the art of teaching, and a reputation as an anatomist of the highest order. We have examined the volume with much care. Although necessarily containing nothing new, the arrangement of text, the clear succinct style, and the excellence of the illustrations, render it a manual on elementary anatomy worthy of a place by the side of the best now in use. Not the least attractive feature of the work is the typographical execution. The paper is tinted, and the print is in the highest degree creditable to the publishers.

Progress of Medical Science.

MATERIA MEDICA AND PHARMACY.

By EDWARD R. SQUIBB, M.D., OF BROOKLYN.

Morphia Salts.—The writer has observed within the past ten years, a gradual augmentation in the doses of these salts, or more particularly of the sulphate, which is, to say the least, very remarkable. The standard works on materia medica and therapeutics state the dose at one-eighth to one-fourth of a grain; and they consider one-sixth to one-fifth of a grain as equivalent to one grain of good opium. But opium itself has undoubtedly diminished in sedative value of late years, thus keeping pace with the general disposition in trade to dilution and adulteration; so that a grain of powdered opium, equal to one and one-fifth grains of the moist drug, is now not more effective, probably, than one grain of the moist drug was formerly. As good Smyrna opium yields never less than nine per cent. of morphia salts, it follows that ten grains of the opium contain nearly one grain of morphia salt, and hence that one-tenth of a grain of morphia salt would be the quantity present in one grain of good opium. But the morphia is not the only narcotic principle of opium; and therefore, admitting that the other narcotic principles together equal the morphia in sedative effect—an admission which is certainly beyond probability—we have one-fifth of a grain of morphia salts as representing one grain of opium. Thus the books, if brought up to the present standard of opium, would probably give one grain of *powdered* opium instead of one grain of opium, as the average anodyne or sedative dose, and one-fifth of a grain of salts of morphia as the therapeutic equivalent. On looking over the treatment of various acute diseases, where no tolerance or habit exists, it is now rare to find any practitioner giving salts of morphia in any such doses. Three prominent papers are now called to mind as having been published within a few months past, wherein the sulphate of morphia was used in acute diseases, namely, sporadic puerperal peritonitis, articular rheumatism, and pneumonia—all by distinguished therapeutists. In the treatment of these diseases it is not uncommon to give one grain of the sulphate at first, to be followed by half a grain every four or six hours, and continued for seven, ten, or even sixteen days. (See Prof. Austin Flint on Pneumonia and Pericarditis, in *N. O. Med. News and Hosp. Gazette* for Sept., 1860.) Now, the smallest probable equivalent to this in the best moist opium would be six grains to start on, and then three grains every four or six hours. Other therapeutists exceed this; and one, Dr. A. L. Hudson, of Rush Medical College, thinks that one grain of "morphia" (alluding, probably, to the ordinary sulphate) is about equal to two grains of opium. These examples may not represent the common practice with salts of morphia with thorough fairness, yet they are not, with the exception of the last, selected from extreme or heroic practice; and the writer's observation

of the practice of good sound authorities leads directly to the inference that there must be some cause for this practice to be looked for in the commercial salts of morphia of the present day.

As it is easily demonstrable that opium has not increased in sedative power, but has probably decreased within the time mentioned, it is fair to infer that it is the salts of morphia that are at fault, and that the deficiency is due to bad pharmacy. When one-sixth to one-fourth of a grain of salts of morphia was found to be equivalent to a grain of opium, the salts of morphia were brown and granular, and presented a very different appearance from the beautiful white crystalline preparations of the present day; and it is a matter of legitimate and important research to determine how far the screwing and torturing processes of modern pharmacy, whereby to get the largest yield and greatest beauty of product, are chargeable with a depreciation of real value in obtaining a fictitious one. Both the druggists and pharmacutists would nowadays instantly reject morphia salts that were of a brown color, and it is probable that most physicians would also object to such as being impure. It is nevertheless a fact that when morphia salts are extracted from opium, in the most simple way, and that which interferes least with their normal condition, they are of a brown color, and that the after processes by which they are rendered white are well calculated to change the character and even the constitution of the delicate alkaloid. Pasteur and others have recently shown conclusively that heat and other apparently feeble chemical agencies are quite capable of converting alkaloids into isomeric substances of similar appearance but very different reaction. Thus strychnia can be easily converted into a substance of precisely the same ultimate composition, which, although crystalline and soluble, is absolutely inert in its effect upon animals. It is known also that morphia, quinia, and veratria, are all subject to metamorphosis by heat, either without, or with but slight change of composition, and that the new products differ in such points of chemical behavior as to lead directly to the inference that they would no longer be therapeutically the same. Hence it is altogether probable, yet certainly not yet proved, that the salts of morphia of commerce are partially changed in the processes of extraction and bleaching, whereby not only a fictitious market value is given to them, but whereby, also, their therapeutic power is much decreased. When opium or cinchona bark solutions are first properly depurated, and the alkaloids thrown down from them, and these alkaloids then converted into salts without bleaching, the salts are of a brown or dirty white color. The amount of coloring matter and all other impurities, however, in such preparations does not amount to more than one or two per cent., and may therefore be totally disregarded in a medical point of view, since but the hundredth part of each grain would be inert. On the other hand, it is not probable that any process of bleaching could be adopted which would not introduce more than twice as much inert matters, or render twice that proportion of the original alkaloid ineffective as a medicinal agent.

There is a great deal of this fictitious value sought and obtained for medicinal substances and preparations which is neither legitimate nor harmless, while it subserves the very bad purpose of often misleading those who can and do judge only by appearances and sensible properties, not only to the acceptance of inferior medicines, but to the condemnation of such as might be better worthy of confidence, wherein the labor and skill might have been bestowed rather upon the material and composition than upon the appearance.

Prostration and Nausea after Opiates.—In the "conclusions" arrived at by Dr. A. L. Hudson, of Rush Medical College, in his prize essay upon Opium, published in the *Chicago Medical Journal* for January, 1860, p. 27 et seq., a statement is made which deserves attention and further observation. It is to the effect that those habituated to the use of tobacco are generally exempt from the distress-

ing sequelæ of prostration, nausea, headache, etc., which so commonly attend the use of opiates.

Cold Water to the Head and Neck in poisoning by Opium.—A recent writer on the treatment of poisoning by opium (see Dr. H. Wardner, of Lind. University, in the *Chicago Medical Examiner* for Sep., p. 548 et seq.), states that cold affusion made by pouring a stream of cold water from a height of three or four feet upon the head and neck, will often arouse a patient from the narcotic condition to the extent of rendering emetics effective, when they would otherwise probably have failed. The well known effect of this expedient in alcoholic narcotism and other conditions of cerebral congestion, gives such plausibility to this simple treatment that it should not be neglected where the emetics fail to act promptly, and where the tendency to coma is difficult to control. Three cases are given by Dr. Wardner in which the practice was evidently very useful.

PHYSIOLOGY AND PATHOLOGY.

By W. H. THOMSON, M.D.

1. *On the Antagonistic Physiological Action of Opium and the Solanaceæ.*—The action of medicines one naturally supposes to be the most cultivated of all subjects of medical investigation; but that the exact contrary is the fact, may be shown by a glance only at the meagre literature of this department of hygienic science. The treatises on materia medica have to deal with it as a matter of course, when they arrive at the great problem of classification; but how largely the resulting systems are the creations of pure theory, may be guessed from their hopeless diversities. The serious discrepancies in the estimates of almost every remedial agent, by eminent authorities, seem to prove nothing so clearly as that we have not collected facts enough yet, to commence explaining them; but in the present state of science must content ourselves with adding to the fund of specific observations on this subject, as the amount already collected, we think, if investigated, will prove to be surprisingly small. Among recent investigations having a direct bearing on this question, are those of Dr. F. Anderson, Assistant Surgeon in the Bengal Army.

The mutual antagonism between opium and belladonna, to which he now adds, in the *Edinburgh Medical Journal*, June, 1860, the narrative of a case of poisoning by stramonium, seems strongly to confirm his conclusions. A Sepoy was brought in, having been found by his comrades in the bazaar of Furrachabad in an insensible condition. He lay on his back with a flushed face, a reddened eye, brilliant and very widely dilated pupils, and in a state of unconscious delirium in which he was constantly occupied with hallucinations, such as catching at imaginary objects in the air, and talking incoherently. He swallowed in a convulsive gulping manner as in delirium tremens. On investigation, it proved that he had bought a great quantity of sweetmeats, which it was inferred were drugged, with the object of robbing, a practice quite common in India, and generally done by means of *bhang* (Indian hemp), or *datura*, the latter of which, Dr. Anderson concluded, was given in this case, from the symptoms. Dr. Anderson commenced by giving a grain of muriate of morphia every hour, and, until eight grains had been administered, no effect was apparent, that is from two P.M. to eleven P.M. After taking the eighth dose, his attention could be caught for a moment by loud talking or commanding; but the pupils remained dilated as before, and the wakefulness continued. The doses were then kept up until in eighteen hours he took fifteen grains of morphine, when he became quite rational, and complained of little except general feverishness and dryness. The opium taken, enormous in quantity as it was, showed no effect except that of counteracting the toxic and physiologic symptoms of the preceding poison, and it was clearly proved also that the patient had never

been in the habit of taking opium previously, so that the tolerance of the medicine could be ascribed to that cause. Should future observations establish this antagonism, one of the many results that will follow will doubtless be a great alteration in the combination of numerous anodyne prescriptions.

2. *Regeneration of Nerves.*—MM. Vulpian and Philippeaux have communicated some of the results of their researches on the regeneration of nerves after injury, in which they state that the peripheral portions of nerves, after having been completely separated by section or excision of a portion from the centres, may yet recover their physiological properties and normal structure, even after having undergone entire change, and this without any previous union taking place between the cut ends. They therefore conclude that it is not necessary for the maintenance of the normal structure of nerves that they should be in intimate connexion with the nervous centres, and that motor force and sensation are not "borrowed forces" derived by the nerves from the central nervous system, but are rather *properties of tissue*, dependent on the integrity of the nutrition and structure of the nervous tubes. The alteration which takes place in the tubes when the nerves are cut, they state to be limited mostly to the disappearance of the medullary substance, which reappears when they are restored to their healthy state, but the steps in this process of restoration are not fully made out. (*Gazette Hebdomadaire*, Sept. 14th, 1860.)

3. *On the Absorption of the Caloric Rays of Light in the Eye.*—A memoir embodying the result of numerous experiments on this subject, was presented to the French Academy by M. J. Jausen, which, among other things, suggests the attempt to procure artificial lights as devoid as possible of caloric rays, as it is found that in our best sources of artificial light, the caloric intensity of the dark radiations is double that of the luminous radiations. The absorption of these heat rays, he states, takes place in the anterior media of the eye, especially in the cornea, which takes up two-thirds, and with extreme rapidity, that and the aqueous humor having the property of separating completely the light and the dark rays, in the same manner as water itself acts on light. The difference in effect upon the eye of the various kinds of artificial light, the author supposes to be owing not to the intensity of the light afforded, but to the varying proportions of the caloric, and the purely luminous rays. (*British Medical Journal*, September 22, 1860.)

4. *Effects of the Extirpation of the Coeliac and Mesenteric Plexus.*—About two years ago Samuels published the results of the extirpation of the coeliac ganglia performed on dogs, cats, and pigs. The chief symptom which could be ascribed to the operation itself, was a greatly increased flow from the mucous surface of the intestine, resembling in some of his cases the discharges in Asiatic cholera. More recently the celebrated physiologist Budge, whose researches on the nervous connexions of the iris had led to the most valuable results, has repeated Samuel's experiment on rabbits, and to a great extent confirms them. The animals generally died in twenty-four hours, though none survived three days. There was greatly increased motion of the bowel, with the discharge of softened feces, mingled with tough glairy mucus and blood, and attended with enlargement of the liver. Should such results as these certainly attend the removal of these great sympathetic ganglia, it will give rise to many important questions in the pathology of abdominal affections, such as the cause of fluxes, which for a long time have been suspected to be owing to paralysis or weakening of function rather than to inflammatory determinations.

5. *Action of Nicotine on the Heart.*—Nicotine has been regarded as possessing in the highest degree the properties of a muscular paralyser, and as such been recommended in the treatment of tetanus. In the *Journal de la Physiologie*, July, 1860, M. Rouget, however, communicates an account of his experiments with it on the heart of frogs, birds, and mammalia, in which it seems to have a directly contrary

effect on that organ to what it produces on other muscular structures. In frogs, killed by the application of a drop of solution of nicotine to the eye, or under the skin, the beating of the heart continued long after all trace of irritability had disappeared in the muscles of locomotion. When the action of the heart had become feeble, and the interval between the beats increased, the direct application of nicotine instantly revived the contractions; they then increased in intensity until they became permanent by leaving the ventricle in a state of tonic spasm, with its cavity completely effaced. In birds and mammalia killed by the inhalation of chloroform, the ventricles remain fixed in the state of diastole, the right auricle alone manifesting some slight tremulous movements. If the ventricles be pricked or galvanized no result is produced, or only some feeble and entirely local contractions take place. When in such a state, M. Rouget always was able to produce by the application of a drop of concentrated solution of nicotine, a general contraction, with an increased irritability to galvanic or mechanical stimulus, and finally permanent tonic spasm. (*British Medical Journal*, September 22, 1860.)

6. *Origin of Bile Pigments.*—The views of the celebrated Dr. F. T. Frerichs, propounded in his late work on the Diseases of the Liver, translated by the New Sydenham Society, on the origin of some of the obscure forms of jaundice, occurring without obstruction of the bile ducts, as in pyæmia, typhus, and often snake bites, have a very interesting physiological bearing. He maintains that in the normal state all the bile formed by the liver does not pass into the intestines by the ducts, but a large portion enters the circulation through the hepatic veins along with the sugar, and to this is added the similar biliary matters absorbed from the bile by the coats of the intestine. These principles are colorless, and are composed of the biliary acids, and in health they are used up in the blood, going through a series of metamorphoses similar to those undergone by the liver sugar. But in these cases of jaundice, the introduction of a morbid matter or virus interferes with these normal transformations, in the same way that the changes of sugar are arrested in diabetes, and therefore, these biliary acids become transformed into bile pigment, which pervades and tinges all the tissues, through the circulation.

Valentin has, since Frerichs' publication, performed some experiments in Frerichs' laboratory, which lead to the inference, "that one of the coloring matters of bile consists of hematin, the substance which is known to be derived from blood pigment." He has succeeded in detecting crystals of hematin in gall stones, in the bile of men and of animals, and in the tissues and secretions of jaundiced persons. Frerichs, therefore, admits that there is an intimate relation between bile pigment and the coloring matter of the blood, and even thinks it probable that the former substance may be developed from the latter. But he argues "that no one has succeeded in obtaining the pigment from the red matter of the blood, and that Valentin's results are not at all opposed to his theory of the convertibility of the colorless biliary acids into bile pigment." (*Dublin Medical Press*, September 5.)

7. *Relations of Urea to Sugar.*—A paper was communicated by Mr. Quain to the Royal Medical and Chirurgical Society, stating the results of hourly analyses of the urine of two diabetic patients under the care of Dr. Parker, of the University College Hospital, made by Mr. S. Ringer, with two others made by Dr. Garrod, of which the most important were that a constant ratio was maintained between the sugar and urea, even after the influence of food taken had entirely disappeared. That the sugar and urea always increased after food, and if the food was purely non-amylaceous or saccharine, the same ratio between them then is observed, that is, one of urea to twenty-two of sugar, so that in both these instances the sugar must have had the same origin with the urea. But if saccharine food was given, though the urea was increased largely as well as the sugar, yet the ratio was destroyed, and the main point is, that the severity of the symptoms is in direct proportion to

the increased ratio of the urea, not of the sugar. This explains why some patients appear to be improving while yet the amount of sugar excreted is increased. These cases, and those of Dr. Garrod, show that a ratio of one of urea to four of sugar, is rapidly fatal, that life may be prolonged with a ratio of one to eight, whilst a somewhat rapid improvement is compatible with a ratio of one to fifteen. The question arises if the increase of both the constituents after meals is from the same source, and as it is most probable that the source of the sugar is in the liver, is not the increased amount of urea after meals in health produced also by the liver. (*Lancet*, October, p. 304.)

BELLEVUE HOSPITAL.

THE winter course of clinical instruction at Bellevue Hospital was inaugurated in the theatre of that institution on Wednesday the 24th of October, at 1½ p.m. There were present on this occasion the Commissioners of Public Charities and Correction, and a number of the most distinguished medical gentlemen of the city, and the medical students from the different colleges.

SIMEON DRAPER, Esq., President of the Board of Commissioners, was introduced by Dr. I. E. TAYLOR. Mr. Draper said that it was only after much importunity that he had consented to speak as the representative of the Board of Commissioners on this the occasion of the commencement of another course of lectures in the Hospital. The new Board of Commissioners had been in power for six months, and during that period many changes had been wrought and many improvements made in the Department. Bellevue Hospital had received their first and chief attention. It has been their constant aim to render Bellevue worthy of the charity for which it was instituted, and creditable to the many distinguished members of the medical profession to which it owed so much. During the last six months they had appropriated \$15,000 towards bringing the institution out of chaos; and with valuable hints from the Committee of the Medical Board, they had succeeded—though there was much yet to be accomplished. The Commissioners could only superintend the general affairs of the Institution, and these duties would be performed faithfully, but to the Medical Board would be left those peculiar internal regulations which are incident to a hospital. With such co-operation between the two Boards, he hoped that Bellevue would always prosper, and prove a welcome asylum for the poor sick.

PROF. VALENTINE MOTT was next introduced. He said that he merely proposed, as the oldest member of the Medical Board of Bellevue, to welcome those students of medicine who proposed to avail themselves of the many advantages which it afforded. Students of medicine could here find opportunities and material for instruction scarcely surpassed by the hospitals of either Europe or America. But perfection in medical science, more than all other sciences, requires untiring industry, unremitting study, and constant observation. Most of the colleges have established clinics; these are most excellent; their advantages are only surpassed by that bed-side instruction which such a hospital as this affords; for here the student can stand by the sick and make himself familiar with disease in all its multiform aspects. These advantages she offers to you fully and freely.

JOHN W. FRANCIS, M.D., LL.D., President of the Medical Board, then addressed the assemblage as follows:—

GENTLEMEN: Commissioners of Public Charities and Correction, Members of the Medical Board, and Students of the Bellevue Hospital:—I again appear before you, but not without reluctance, having so repeatedly assumed the duty now required of me, at the solicitation of the Faculty connected with this institution. Were my own wishes consulted, I had rather that some other of the Medical Board had occupied my place on this occasion, for I feel the weight of

that obligation which demands that age should give place to younger years and more prompt and immediate knowledge. I feel the truth of the ethical reflection announced by our distinguished anatomist and professor, Wm. H. Van Buren, of this city, that it is a very hard thing to grow old gracefully, and I may add, a very rare sight to behold.

On former meetings introductory to the commencement of the several courses of instruction, delivered at the Bellevue Hospital, I have invited your attention more to the history of the past than to the present condition of our great profession, and for this special reason, agreeing with Lord Bacon and other master minds, that he who is acquainted with the history of science becomes an adept in the science itself. I cannot but hope that, at our several interviews, I have called up the ghosts of our departed worthies in relation to the labors which they had sustained and the services they had effected in the promotion of the great art of healing, with positive benefit to our intellectual discipline, to our increase of saving wisdom, and to the gratification of the charities which ever flow from a noble heart.

Gentlemen: We meet here to-day under new auspices. Legislative enactment has created a different order of things; the administration of Bellevue Hospital is changed: the former Board of Commissioners has given place to a new régime, and by executive authority four gentlemen, alike distinguished for private worth, enlightened zeal, and humanity, as well as for fiscal ability, have assumed the responsible duties so intimately connected with the government of this great charity. Their names are familiar as household words, and they are high in public estimation—Simeon Draper, Moses Grinnell, Isaac Bell, Jun., and James B. Nicholson. Be it our earnest prayer that the blessings enjoyed by this Institution under the control of the former disinterested Board may be augmented tenfold by our present enlightened, able, and benevolent Directors.

With regard to this asylum many alterations and improvements have been made since our last anniversary, in the internal economy of the hospital itself, projected and adopted by the former commissioners, and others now effected by the present Board. In fine, the Bellevue Hospital presents itself to our contemplation as among the very first of the land, whether we regard its capacity, its locality, its conveniences, and the material it affords for the cultivation of medical and surgical science, or the blessings it daily imparts to the sick and the afflicted. To these favorable circumstances it is proper to add that a new and improved Code of Laws has been framed, and will be observed with beneficial results by the responsible and worthy individuals charged with the supervision of this ample establishment. In justice to the municipal authorities of this metropolis, to the legislative wisdom of the state, and to the several bodies who in the career of the Bellevue Hospital have enacted their part in rearing this vast charity to its present lofty condition, I am constrained to pronounce this institution a great success, a triumph, honorable to an enlightened community, and a civic trophy of philanthropic endeavors. Its history abounds in profitable instruction from which the intellect of another Howard might become the more enlightened.

It is not my duty, nor would it be becoming at this time for me, to attempt to lecture to you on any specific disease, but rather to point out to you the ample and wonderful facilities you have at your command in this place for the acquisition of that practical knowledge which alone will enable you to combat successfully the numerous diseases to which flesh is heir; and to assure you of the joyous welcome you will receive as students from the eminent Medical Faculty in attendance on the inmates of this hospital. Should you neglect the opportunities offered to you so kindly and so freely, that neglect will prove an abiding sorrow, which like true malignant disease can never be eradicated.

It would seem therefore to be more within the compass of my obligations at this time to speak of the profession

which you have chosen as the business of your life in a general way, than to enlarge on any particular branch. You need hardly be told that what the Bible is to the expositor of sacred truth, so is anatomy to the practitioner of the medical and surgical art; it would be useless for me to inform you that as is the telescope to the astronomer, so is chemistry to the investigator of physiological phenomena; that pathological anatomy is only to be comprehended by visual inspection, and that the most intricate and minute structure of organic bodies can only be viewed by the piercing eye of the microscope; and who is justified in attempting to administer remedial agents for the modification and cure of disease who is not familiar with the natural history, physical appearance, and special action of the articles of the *materia medica* with their several compounds and their posology? For the day has assuredly passed when we are to encounter prescribers heroically dealing with drugs and their pharmaceutical properties, of neither of which they have knowledge, and who are unable to distinguish rhubarb from bark, or the oxyde of bismuth from the oxyde of arsenic.

Gentlemen: Those of you who conscientiously and assiduously attend the various courses of instruction delivered by the Medical Faculty of this school during the ensuing winter, will find yourselves at the end of the season laden with precious truths that must for ever prove a storehouse of knowledge from which you can at all times draw *ad libitum, ad infinitum*. Here you have unfolded to you the mysteries of percussion and auscultation: in the wards of this hospital you are taught not only to diagnose disease, but to learn its treatment and become adepts in the difficult science of prognosis. Here you have presented to you pathology, with the aid of the surgeon's knife in the skillful dissection of the cadaver. The anatomical museum connected with this school, and founded by Dr. James R. Wood, is destined to realize the noblest views of its projector, and will prove to you a never-failing source of professional wealth, and make that impression on your mind which abstract closet study can never secure.

Particular pains have been taken, by recent arrangements, to render this hospital an effective retreat for women in the pregnant and parturient state, and the officials entrusted with the supervision of the wards accommodated to that purpose will afford you every facility in their power to become practically acquainted with the most improved treatment of gestation in its several stages, and the management of actual labor in all its varieties, natural and instrumental, with the attendant disorders incident to parturition. Here you will be taught to detect the pulsations of the foetal heart; to discriminate between true and false pregnancy; to anticipate that bane of all accoucheurs, uræmic convulsions, and how to administer anæsthetics when they occur; the signs of the living and the dead child, and other leading principles which our present knowledge of medical jurisprudence inculcates with such discrimination. Obstetrics in its several relations you need not be told is, of all other departments of our art, that particular branch through which you are to secure family practice, and upon the dexterous discharge of the duties of the obstetrician will often depend the speedy elevation of a young man to professional reputation and consideration. I may be permitted thus to speak of the issues of obstetrical science. He who for a period of fifty years has encountered the toils connected with that anxious and responsible art, cannot be accused of presumption in thus expressing his opinion.

We may well rejoice in the great improvements with which obstetrical science has been enriched in recent days by the several productions of many able observers, and not the least by the admirable work just published by Dr. Tyler Smith, as edited by Professor Gardner, of this city. While the accoucheur discards the too frequent interference of art as inculcated by the once popular Smellie, who practised largely and taught, with pecuniary results, Midwifery for five shillings; so on the other hand he guards against that reprehensible delay which marked the conduct of the great

William Hunter, and timely interposes art after deliberation and consultation. It is worthy of commemoration that the first professional course of instruction on Obstetrics in the American colonies was organized in New York, by Dr. Tennant, so early as in 1768, in King's (now Columbia) College, and a like remark may be made in relation to the recognition of the science of forensic medicine. That venerable classical school, as long ago as 1804, appointed Dr. James S. Stringham their professor of medical jurisprudence, the better to complete the body of scientific medicine in this institution where the doctorate was conferred. Dr. Stringham's course, though brief, was instructive. His death, at the age of forty-seven years, led to my appointment as his successor, in 1817, in the College of Physicians and Surgeons, and the close relationship between midwifery and many subjects involved in legal medicine added to the value of the great truths thus imparted. I need scarcely add that an intimate acquaintance with this intricate study is imperative in all zealous of professional renown, and that ignorance therein is fatal to medical reputation when the physician or surgeon is summoned in courts of criminal judicature. Never forget the sad figure which even the great John Hunter made in such a crisis under such circumstances.

At this session the three colleges now open to receive you, have each able teachers, and have made provision for imparting scientific knowledge in legal medicine. With several large and commodious hospitals, with infirmaries and dispensaries too numerous to specify, you have then the most ample means of studying diseases *practically*, and my earnest desire is, that whatever may be your thirst for *book* information, you will never omit the opportunity of seeing with your own eyes every important case that your clinical instructor furnishes. Never forget the Horatian precept of the superiority of that knowledge which actual observation secures over every other species of acquisition imparted by the other senses.

Many of you now before me, at the close of your educational career, and after you have received that much to be coveted honor, your diploma, admitting you into the ranks of the profession, will either by choice or necessity be compelled to establish yourselves in rural districts. You will thus be cut off from the very fountain of hygienic principles, such as are in use in the Bellevue Hospital, and other establishments of a similar nature. If you take my advice you, with your other notes on lectures and cases, will make concise but pertinent memoranda on the Hospital, and the regulations enforced by its government. The discipline of the attendants, as well as that of the patient, must not be overlooked. The diet prescribed must be noted, the construction of the building, its ventilation, the manner in which temperature is regulated, the method of use and the application of disinfecting agents, all claim your attention; and he who upon his departure takes with him a thorough knowledge of the workings of the complex machinery of an institution of this character will possess wisdom ever of practical value. The most judicious treatment will often be frustrated for want of proper ventilation; and the most scientific application of remedial agents may prove abortive by an improper diet. Nor are you to forget that the life of your patient often depends upon the discipline of the nurse.

I have thus in briefest language told you of the advantages which the Hospital presents for your acceptance. It remains for you to avail yourselves of these benefits.

According to my views, Clinical Instruction so abundantly afforded, so freely offered, and so wisely taught by men so competent as by the Bellevue Hospital faculty, is not to be slighted or neglected with impunity. Each revolving day of your professional career will give you new demonstrations of its inestimable value, and the joy and relief which you will experience from its acquisition will more than repay you for the most arduous struggle you may have undergone to acquire it. And, gentlemen, let me add, that the great responsibilities you assume in the title of Physician, as earthly guardians over the lives of your fellow-

creatures, are of too grave and sacred a character to be undertaken in a spirit of indifference. You are to be ever impressed with the great truth, that you are accountable to your Divine Master for the proper use of the time and the opportunities which in his infinite wisdom he has vouchsafed to you. But in the midst of those great trials which will often encompass you, conscious knowledge will prove your greatest support.

Time presses, and I must make place for others. But ere I close I shall, with your permission, consider in a most summary manner the important question, Is our profession undergoing a retrograde or a progressive movement, or does it remain *in statu quo*? Some observation, considerable study, and not a little reflection lead me to affirm that it is progressive; that, like other sciences, its march is onward. Its devotees are men of too exalted minds, of too noble aspirations, and too philanthropic, to abate that earnestness and devotion which have stamped the science with a prestige that shall last so long as the earth shall revolve on its axis, and until that day shall come when the fiat shall go forth from the Creator, that time shall be no more.

The disciples of the healing art stand ever ready to obey the call of duty; for them war, plague, pestilence, and famine have no terrors; to them battle, murder, and sudden death are words which, instead of intimidating, only serve to call forth the brighter dictates of their humanity. Like the Old Guard of Napoleon at the battle of Waterloo, no sooner does one perish than another stands forth to take his place in the ranks. A long life enables me to be a living witness of the truth of this assertion, confirmed in seasons of pestilence, of yellow fever, ship fever, and cholera.

Every science has its calumniators, and in our own calling there are those, I am grieved to say, who misrepresent and abuse that profession which has given them reputation, consideration, honors—bread. But we will pass them by, and leave them in the luxury of the marasmus of their depraved imaginings. Naturalists tell us that ill weeds infest the same grounds where the choicest plants flourish, and by whose shade they are protected; and we must be content with the laws of nature. To such as would deface the temple of medical science, may well be applied the injunction of the Latin poet:

"Qui, ne tuberibus propriis offendant amicum,
Postulat, ignoret verrucae illius."

The honest meaning of which I take to be: He who is annoyed by wens must deal leniently with those afflicted with pimples.

It is true that the science of medicine has not been able to grapple with every obstacle which opposes its progress, but let me ask, is not this the case with every branch of knowledge? How is it with the law, how with political economy? It cannot be denied that our art has not as yet clearly elucidated the intricate laws which govern the nervous system, that certain diseases still maintain their mastery over the best efforts of therapeutical skill; neither can it be disputed that at times drugs are administered in over-doses, and at improper periods, and at other times withheld to the lasting detriment of the patient. But would we be justified from circumstances like these to pronounce the divine art a delusion and as void of efficacy? We might as well declare the science of mechanics a *myth*, because its culminating point has not yet been reached, or stupidly pronounce our anathemas against steam, as a motive power, because a flue collapses or a boiler bursts. Are we to dispense with the blessings of gospel preaching because hypocrites abound? Can any one allow that science to be retrograding which has by its various appliances in modern time added to the continuance of human life an additional average duration of some seven years and upwards? Should we admit it to be stationary when philosophical study and minute observation bring to view almost daily new facts and new elucidations on the nature of disease, and the remedial power for its removal? Can any one deny the blessings which Marshall Hall has conferred on the human

race by his "ready method" for artificial respiration? Who could refuse to acknowledge the progress of our art when he beholds the improved treatment of the insane, and the idiotic, and the blind; the enlarged views recently promulgated by Dr. Turner and others for the hapless inebriate; the successful treatment of varicose veins by injections of the persulphate of iron; the ingenious method of treating prolapses of the funis introduced by Dr. Thomas of this Institution; the numerous mechanical appliances for alleviating malformations and spinal disorders.

But it is not necessary that I should continue this argument any longer; and in justification of the few words I have uttered, I may remark that this brief and imperfect allusion to the progress of the great medical art has been called forth by the virtuous indignation which I felt, when hearing individuals, in high places, calumniate that science which I love, and to which I have devoted a long life. It is impossible for any man of honorable feeling to contemplate the vast labors which have been endured by the founders and improvers of our art without a sense of the greatest respect for their disinterested and self-denying exertions, and love of that Christian philanthropy which moved them to the performance of those mighty efforts. In conclusion, permit me to add, that you live in an age of great mental activity; and that the members of the medical profession occupy the vanguard in the contest against ignorance, superstition, and untenable speculation; that physicians, of all other men, are the interpreters of nature. The atmosphere which you now breathe is impregnated with harmonious and truthful information. You cannot remain indifferent or inactive. You must enter with earnestness into the strife, or be content to sink into a wretched mediocrity or a hopeless obscurity. To appreciate your profession you must study it faithfully; to succeed in your profession, you must believe in it thoroughly; and to conscientiously perform the duties it requires of you, you must love it honestly. Search abroad for knowledge, if you please; be not supine in deriving wisdom from the manifold demonstrations of new truths imparted by British and continental laborers; at the same time forget not that your own land presents a phalax of intellectual elaboration fraught with practical issues. But fear not to pluck the luscious fruit of medical experience from the tree of knowledge wherever it may spring forth, whether indigenous or exotic. Be not disheartened at the work before you. Let the triumphs of such men as the world-renowned physiologists, Brown-Séquard, and Dr. John Draper, and Dalton, and the chemist Doremus, serve as a stimulus to your noble zeal; and let your hearts be cheered when you peruse the pages replete with the inductive philosophy, that have emanated from the gifted brains of our eminent Professors Dickson and Gross, from our Austin Flint and our Frank Hamilton. If perchance your spirits should at any time droop, let a new inspiration impart its power when you listen to the learned prelections on that lofty study, Medical Jurisprudence, delivered by Prof. Ordroneaux, now of Columbia College in this city; or contemplate the unsurpassed investigations on the Malpighian bodies, conducted by the late beloved and distinguished anatomist Dr. Charles E. Isaacs, whose mortal frame the earth has so recently received. Gentlemen, I will tax you no longer: my prayer is for your prosperity and happiness, both temporal and eternal.

Dr. B. W. McCready followed Dr. Francis with a few remarks. He said that no words of his could magnify the importance of studying medicine clinically. He was not unmindful of the constant demand on the time of the student. Yet his great aim is to learn how to *practise* medicine and surgery, and he might as well attempt to perfect himself in botany from the mere study of books in a closet as to practise his profession without the aid of clinical instruction. There is no position more trying than for a young physician to find himself in the face of a mighty responsibility, ignorant as to how he should act, and far removed from the aid of counsel or assistance. If you would avert a catastrophe like this, make good use of your

time while here. Facilities are here offered you, unsurpassed on this side of the ocean; indeed, this may be pronounced one of the best conducted charities in the world, containing as it does almost every variety of disease which afflicts the human family. Students when they visit the hospital should not expect regular lectures upon all occasions; they should rather pick up those casual and practical remarks which are dropped as they pass from bed to bed, while they practise with assiduity and care the means of diagnosis, such as auscultation and percussion, palpation, &c. The position of Resident Physician or Surgeon to Bellevue is open to the medical profession of the whole country; these posts are acquired by merit alone; it is our endeavor in making selections to procure the best talent which the country affords.

Dr. FRANCIS then read a notice from Dr. ALEX. B. MOTT to the medical students of New York city, stating that he would offer for their competition, a prize, consisting of a case of amputating and trephining instruments, for the best dissection of the head and neck. The merits of the dissections would be decided by the professors of anatomy in the several colleges.

Correspondence.

PATHOLOGY OF TETANUS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—You omit in your report of the proceedings of the Academy of Medicine, at its last stated meeting, my reply to the remark of Dr. Watson, "That Dr. McNulty took very singular views of the subject (tetanus). According to such theory, it would be as well to suppose that hydrophobia did not depend upon the bite of a dog, because every one bitten did not suffer from the disease." My answer was, that it was the *specific virus* on the dog's tooth, and *not the dog-bite*, that produced hydrophobia. I did not at the time, neither do I now, regard the comparison as a just one. I claim that there are occurring daily, many hundred local injuries (equal in extent, to those that have been assigned as the cause of tetanus), that those local injuries amount to nearly, or quite, *half-a-million* every year, that out of this vast number not more than *ten* or *fifteen* cases will be followed by tetanus, or about *one case* of tetanus to *thirty thousand* cases of local injury. Hence I claim that local injury is not, *per se*, the cause of tetanus. It is an "*axiom*" in every science, that "Like cause under like circumstances must of necessity produce like results." I claim that the law is as true, *when applied to local injuries*, as to any of the phenomena of the natural world, and that it proves beyond question that local injury is not the true cause of tetanus. I do not profess to point out the cause of the disease; I only stated my belief that it was due to the presence of a morbid principle circulating in the system of those subject to the disease, producing a *tetanic diathesis*, that those possessing that peculiar diathesis, and *those only*, will be attacked with tetanus, either *Traumatic* or *Idiopathic*.—I am respectfully yours, &c.,

J. McNULTY, M.D.

October 30.

"RATIONAL medicine! Trust the power of nature! Very good doctrine, said the chick, for Father Cock to preach to me, shut up in this dark cell, while he struts in the golden sunshine. By Jove! I won't wait any longer for Dame Nature to break this shell and set me free." Whereupon it dashed its beak through its delicate covering, and shivering it to atoms, stepped forth to the full enjoyment of life.

Moral.—The wisest purposes in nature are not accomplished without the aid of mortals, and he is the true physician who rightly interprets her designs, and lends her timely assistance.—*Old Fable*.

Medical News.

APPOINTMENTS.

BUFFALO MEDICAL COLLEGE.—E. M. Moore, M.D., Professor of Surgery, in place of Prof. F. H. Hamilton, resigned.

LIND UNIVERSITY, CHICAGO.—I. Hollister, M.D., Professor of Anatomy, in place of Prof. Titus Deville. A. L. McArthur, M.D., Professor of Materia Medica and Therapeutics, in place of Prof. Hollister.

IOWA LUNATIC ASYLUM.—R. J. Paterson, M.D., late Superintendent of the Ohio Idiot Asylum, Superintendent.

CHARLESTON MEDICAL COLLEGE.—Francis T. Miles, M.D., late Demonstrator in that Institution, Professor of Anatomy, in place of Prof. John E. Holbrook, resigned.

NEW ORLEANS SCHOOL OF MEDICINE.—H. T. Schmidt, M.D., late Assis. Demonstrator of Anatomy in the University of Pennsylvania, Demonstrator of Anatomy.

MARRIAGES.

MERRITT—ROWE.—On October 24th, at the Church of the Messiah, by the Rev. Dr. Osgood, J. King Merritt, M.D., to Julia Teresa, youngest daughter of James Rowe, Esq., all of this city.

DEATHS.

DIED.—On the 17th of September last, Dr. Bezin Reece Masters, in Pembroke Parish, Bermuda, aged thirty-three years. Dr. Masters graduated at the College of Physicians and Surgeons with honor, about twelve years ago. After an ample experience in Bellevue, Ward's Island, and Quarantine Hospitals, and as Surgeon-in-chief in the service of the Panama R. R. Co., embracing in the aggregate a period of about five years, he established his residence in this city. The success which he met with was flattering and richly merited. As a physician Dr. Masters possessed that discriminating judgment which, aided by an unusual store of information obtained by thorough preliminary study, and extensive hospital experience, made him correct in diagnosis, and rich in therapeutical knowledge. His integrity was unquestioned. This, together with a native suavity and gentleness of manner, contributed not a little to make him respected by the profession, and beloved by his friends. "Having been forced a few months since," says a Bermuda paper, "by the rapid progress of an insidious disease (enlargement of the liver) to suspend professional work, he left New York for the West Indies, in the hope that the sea voyage and change of air might produce benefit. No improvement, however, occurring, he came to try the effects of his native air, but after only eight short weeks with his friends his life closed, and with Christian serenity he has passed away to the 'blessed inheritance of the saints in light.'"

PROF. HAMILTON will deliver a course of lectures on *Military Surgery* in the next preliminary course of the Long Island College Hospital. This subject is chosen at the special request of several Surgeons of the Army, and the course cannot fail, in the hands of Prof. Hamilton, of being of great interest and profit, both to army surgeons and students intending to enter the army.

DR. HORATIO R. STORRER, of Boston, has opened an establishment for the treatment of the diseases of women, at Blue Hills, Milton, Mass.

THE BOSTON JOURNAL OF PHYSICAL CULTURE is the title of a monthly publication devoted to Gymnastics, and edited by Dr. Lewis.

HÔPITAL DU MIDI.—The vacancy in this establishment caused by the resignation of M. Ricord has been filled by the appointment of M. Cusco, late Surgeon of the Salpêtrière.

DR. H. F. CAMPBELL, of Augusta, Ga., has invented an air plug for the speculum uteri to facilitate its introduction. It consists of "an elongated india-rubber bag, with a tube

of the same material at its posterior end. This tube may be eight or ten inches in length; must have an air-tight stop-cock in the end; the bag is put into the speculum in a flaccid state, protruding a little beyond the uterine end, just enough to produce a somewhat wedge-shaped rotundity when fully blown up. At the point where the end of the speculum would form a ridge, there is a slight elevation or crimp on the bag; so that when the bag is blown up, the edge of the speculum is buried in the india-rubber, and completely protected from coming in contact with the delicate soft parts of the vulva or vagina. The bag being properly adjusted in, the speculum is now fully distended with air from the mouth of the operator, and the stop-cock closed. The whole instrument is now lubricated with oil, and introduced in the usual manner, when the stop-cock may be turned and the air allowed to escape. The bag of course becomes flaccid again, and can be easily removed by pulling on the tube, when the speculum may be adjusted so as to bring into view the os uteri and any other parts to be examined."

AT THE SEMI-ANNUAL meeting of the College of Physicians and Surgeons of Lower Canada, the Examining Body of that Province, the question was raised whether candidates who presented no testimonials of having attended a course on botany, should be admitted to examination. It was finally decided that the present candidates should be admitted to examination, owing to their ignorance of the provision, but hereafter such testimonials will be strictly required. Seven gentlemen were found qualified and received licenses to practise, two were remanded to their studies for six months, thirteen were found qualified by their preliminary studies to enter upon the study of medicine, and two were remanded to the further prosecution of their classical studies. Madame Gaden was examined in the science and art of Midwifery, and duly licensed as a Midwife within the cities of Quebec, Montreal, and Three Rivers.

AMERICAN MEDICAL TIMES.—We have waited to see nine numbers of this publication appear before venturing to pass our opinion upon it, and are glad to say we have been agreeably surprised at the able and talented manner in which it is conducted. The leading articles are written with great talent, the subjects well selected, and the reviews handled with ability. We wish the journal every success, and can recommend it with confidence to our readers as a weekly Medical paper second to none in America, and worthy to rank with the best of our own in England.—*London Medical Review*, October.

TO CORRESPONDENTS.

Cal.—We have heard of a school in California, but have never seen the announcement.

T. L.—We are obliged to you for the correction; the list was corrected by a reliable person before publication.

E. J. F.—Your letter was duly received and forwarded to Dr. Squibb.

Treatment of Delirium Tremens.—"I was much interested in Dr. Griscom's able lectures, and especially in that portion relating to the diagnosis and treatment of delirium tremens. Every one admits that sleep is at least one of the cardinal points in the treatment; but I was taught by an eminent Professor of New York, to avoid narcotics as a means of obtaining sleep, and to trust to fatigue. His favorite illustration was the method pursued by sailors when one of their companions was seized with delirium tremens, viz. shut him up in a dark room, and allow him to tire himself out. I have followed this advice, and must say that I have as often secured sound sleep within ten or twelve hours, as when I used anodynes."

BROOKLYN, Oct. 29, 1860.

C.

Treatment of the Placenta.—"I wish to state in reply to L. B. that in a family practice of fifteen years, I have never yet once waited for the expulsion of the placenta by the natural efforts. My rule is always to introduce the hand immediately after the child is removed, seize whatever portion of the placenta may be within reach, and asking the woman to cough, make gentle traction. The results of this practice in more than five hundred cases, are, not a case of flooding, or post-partum hemorrhage, nor other unfavorable occurrence. By this treatment, I am never detained ten minutes after delivery is accomplished."

CT., Oct. 30, 1860.

A. C.

Solidified Milk.—"I am anxious to call the attention of medical men to the advantages of solidified milk in children which are brought up by hand. During the past summer I have employed it as the food of several infants that could not nurse, and in no instance have there been any of the troubles usual among children fed in the ordinary way."

N. Y., Oct. 27, 1860.

AN OLD PHYSICIAN.

COMMUNICATIONS have been received from:—

M. L. BAINES, London; Prof. W. H. VAN BUREN, N. Y.; Dr. W. W. ELY, N. Y.; Dr. W. B. BIRBING, N. Y.; Prof. J. C. HUTCHINSON, N.B.; Dr. T. L. MASON, N. Y.; Dr. W. B. ATKINSON, Pa.; Dr. J. L. CAMPBELL, N. Y.; Prof. C. MATTHEWS, N. Y.; A PHYSICIAN, N. Y.; Dr. D. C. PETERS, U. S. A.; Dr. A. MORAND, Va.; Dr. F. E. CHATARD, Md.; Dr. E. J. FOUNTAIN, Iowa; Dr. W. RILEY, Md.; Dr. J. MCNICITY, N. Y.; Dr. W. N. BUEL, N. Y.; Dr. G. WHITTRIDGE, Md.; Dr. C. W. BOYCE, N. Y.; Dr. T. C. BUCKLER, Md.; Prof. A. B. PALMER, Mich.; Prof. L. BAUER, N. Y.; Dr. DONALDSON, Md.; Dr. P. C. WILLIAMS, Md.; Dr. J. THORNTON, U. S. A.; N. J.; Dr. C. C. MARSTELLER, Va.; Dr. R. A. WHITE, Conn.; Dr. L. KEEN, Ind.; Dr. A. WILLARD, N. Y.; Dr. O. F. MANSON, N. C.; Dr. E. P. ALLEN, Pa.; Dr. J. L. AME, Mass.; Dr. D. J. LYSTER, N. Y.; Dr. D. C. HOLLEY, Mich.; Dr. E. AIKEN, Conn.; Dr. R. B. MAURY; B. DAWSON & SON, N. C.; Dr. R. S. SMITH, N. J.; Dr. C. FRIOT, N. Y.; Dr. D. HASBROUCK, N. J.; Dr. H. B. RAWSON, Iowa; Dr. R. E. ROBINSON, N. C.; Dr. C. H. RAWSON, Iowa.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 30th day of October to the 27th day of October, 1860.

Deaths.—Men, 95; women, 78; boys, 112; girls, 105—total, 390. Adults, 178; children, 317; males, 207; females, 188; colored, 7. Infants under two years of age, 156. Among the causes of death we notice:—cholera-infantum, 10; infantile convulsions, 28; croup, 20; diphtheria, 6; diarrhoea, 6; dysentery, 5; scarlet fever, 17; typhus and typhoid fever, 16; pertussis, 0; consumption, 60; small-pox, 6; dropsy of head, 14; infantile marasmus, 22; inflammation of the brain, 9; of bowels, 9; of lungs, 26; and whooping-cough, 5. Nervous system, 55; digestive, 71; respiratory, 181.

Oct.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10.	In.
21st.	29.94	.08	52	50	54	3	7	NE.	10	.3
22nd.	29.95	.08	49	46	57	4	6	NE.	10	.01
23rd.	29.88	.07	56	50	62	5	8	NE.	3	
24th.	29.86	.08	55	50	58	7	12	SW.	1	
25th.	30.00	.07	58	51	64	8	12	SW.	1	
26th.	30.00	.04	61	52	70	8.3	13	SW.	02	
27th.	30.14	.14	53	46	60	8.5	18	NW.	02	

REMARKS upon certain phases of the weather not shown by the table above. 22nd, calm, with light fog and rain, A.M.; 23rd, calm A.M., wind light P.M., sky clear; 24th and 25th, fine, mostly calm; 26th, dense fog A.M., with little wind; fresh breeze P.M.; 27th, wind light all day.

MEDICAL DIARY OF THE WEEK.

Monday, Nov. 5.	{ CITY HOSPITAL, Surgery, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Macready, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Nov. 6.	{ CITY HOSPITAL, Surgery, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, half-past 1 P.M.
Wednesday, Nov. 7.	{ EYE INFIRMARY, Operations, 12 M. CITY HOSPITAL, Medicine, Dr. Smith, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Gouley, half-past 1 P.M. ACADEMY OF MEDICINE, half-past 7 P.M.
Thursday, Nov. 8.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Surgery, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M.
Friday, Nov. 9.	{ CITY HOSPITAL, Dr. Parker, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, 1½ P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Nov. 10.	{ BELLEVUE HOSP., Drs. Parker and Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. CITY HOSPITAL, Medicine, Dr. Smith, half-past 1 P.M. EMIGRANTS' HOSP., WARD'S ISLAND, Dr. Carnochan, 8 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

BELLEVUE HOSPITAL.—On Saturday (this day), Nov. 3, DR. JAMES R. WOOD will resect a knee-joint.

NEW YORK ACADEMY OF MEDICINE.—The Annual Meeting of the N. Y. Academy of Medicine, will be held in the Hall of the Historical Society, Second Avenue, corner Eleventh st., on Wednesday, November 7, at 7½ P.M. The Anniversary Oration will be delivered by DR. JOHN WATSON. The profession and the public are respectfully invited to attend.

Original Lectures.

CLINICAL LECTURE

DELIVERED AT THE NEW YORK HOSPITAL.

BY H. D. BULKLEY, M.D.

ATTENDING PHYSICIAN.

I WISH now, gentlemen, to direct your attention to a case of enlargement of the liver and cardiac disease, with effusion into the abdominal cavity, which presents several points of interest.

ENLARGEMENT OF THE LIVER.

The patient, a native of Ireland, 25 years of age, a bartender by occupation, entered the hospital July 24. He is of medium size, has dark hair and complexion. He has been long in the habit of drinking some liquor every day, generally brandy or gin, but never drank to excess. Has never had any form of venereal disease, has never had rheumatism, and has taken but little medicine of any kind during his life. Has always enjoyed good health until his present illness, except that he has for several years been subject to "bilious attacks." He noticed about six months ago that his feet were swollen. This continued without the occurrence of anything else to attract his attention until about three weeks ago, when his abdomen also became distended. He suffered no pain anywhere, and there was no derangement of his general health. Has noticed that his urine has become high colored, and rather scanty, during the last two weeks, but does not think that his abdomen has increased in size during that time, and he has been able to continue at his work until two days ago. His bowels are generally rather loose, and his stools vary in color, being sometimes very dark, and at other times light.

As we now see him for the first time, his aspect is that of a spare and unhealthy looking man. His complexion is sallow, his whole skin has a dingy hue, and his eyes are slightly tinged with yellow. He is free from both cough and headache. His tongue is slightly furred white—appetite fair. Pulse 96, rather small, but regular. Urine rather scanty and high colored—contains no albumen, but is highly charged with the phosphates. His abdomen is considerably distended, but not tense, soft under pressure, fluctuation well marked. The superficial veins over the lower part of the abdomen are quite turgid and tortuous, but extend up only a moderate distance, differing in this respect from those cases in which the veins are less distended, but extend over a much larger surface. The liver is perceptibly much enlarged, showing a protrusion to the eye, and extending between three and four inches below the margin of the ribs, its edge forming a well defined line, which can easily be traced by the fingers, the enlargement extending to about the middle of the left hypochondrium. The upper surface is also somewhat uneven. No enlargement of the spleen can be detected. The left foot and leg are also somewhat swollen and cedematous. There is a slight bruit with the first sound of the heart, most audible at the apex; but no apparent hypertrophy of that organ.

Four days have now elapsed since he entered the hospital, and during this time free diuresis has taken place, without any medicine, simply under the influence of rest in a recumbent position, and entire change in his habits; so that he passed forty ounces of urine during one period of twenty-four hours, and seventy-two ounces during the succeeding twenty-four hours.

We have then no difficulty in recognising a case of enlargement of the liver, with slight jaundice and moderate effusion into the abdomen, complicated with disease of the mitral valve; and we are as little at a loss as to the cause, which is evidently found in the habits of the patient, who

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has been for a long time accustomed to the daily use of alcoholic drinks. You are aware that alcohol enters into the circulation only through the liver, and that it is to this fact we must attribute the large share it has in the production of chronic diseases of that organ.

The dropsical effusion was just noticed in the feet; but this forms no exception to the rule laid down on a former occasion for locating the cause of the effusion in ascites, which constitutes the great share of the dropsical effusion in the present case; for we have other causes to account satisfactorily for the effusion in the lower extremities. His occupation as bar-tender, which requires him to be in a standing position most of the time, may have had some effect in producing the first effusion there; then a debilitated state of the system and vitiated condition of the blood may have aided to produce it; but more especially we have a diseased condition of the heart as a sufficient cause, even without the others. We feel at liberty, therefore, to say that the effusion into the abdomen has a separate and distinct cause, and this we believe to be the enlargement of the liver.

But what is the nature of the enlargement? Is it a case of cirrhosis in the early stage, when the liver is said by some pathologists to be enlarged? Cirrhosis of the liver is a form of disease characterized by inflammation of the fibrous tissue which forms the skeleton of this organ, and within which the vessels and ducts are interlaced, in the latter stage of which there is a shrinking in size, and an indurated state, and a strangulation, as it were, of the minute branches of the portal vein, by the contraction of lymph effused about them, so that the flow of blood into them is retarded, and in advanced cases entirely interrupted, thus giving rise to incurable ascites. The habitual use of alcoholic drinks is recognised as by far the most common cause of this state of the liver, so much so that Watson says that in ninety-nine cases out of one hundred, cirrhosis is owing to this cause. It is certainly a very frequent cause, but these figures do not correspond entirely with my own much more limited experience in the disease.

This cause we have certainly here in action in the most unequivocal manner. We have also the precursory "bilious attacks," affording evidence of its agency; we have marked enlargement of the liver, doubtless the result of congestion, produced by this indulgence in alcoholic drinks; and we have ascites, a condition which no other morbid state of the liver is so apt to produce at all, and certainly not to the same degree, as cirrhosis. But then we have a history entirely different from that of cirrhosis, which usually begins much more insidiously, so that we arrive at our diagnosis of it rather from inference, and by exclusion of other affections of the liver, than by any direct palpable signs, except ascites, which does not constitute in the present instance the overruling and characteristic symptom, as in cirrhosis generally; and, besides this, the free diuresis which has taken place since he entered the hospital, and the consequent diminution of the swelling of the abdomen, could hardly occur in true cirrhosis, in which we are supposed to have a mechanical and hence persistent cause of dropsy. The turgescence of the superficial veins of the abdomen has also already much diminished, a change which we should not expect in cirrhosis. We have also in this case a certain amount of jaundice, which, though not excessive, reaches a degree not usually found to accompany cirrhosis, in which disease, indeed, jaundice is rather the exception than the rule.

Is it a case of simple hypertrophy of the liver, that is, simple enlargement of the organ, without any change in its intimate structure, or any interstitial deposit, as we see in a muscle enlarged from use? This does doubtless sometimes occur, but would be much less apt to take place in an organ like the liver, and is now found to be much less frequent than was supposed to be the case before modern investigations had thrown so much light upon its pathology. It is now found that the increase of size is sometimes owing to fatty deposit, and sometimes to that change known as

waxy degeneration, in both of which cases there is something retained within the liver which increases its bulk, and renders its pathological state entirely different from that of cirrhosis already described.

I exclude the idea of malignant disease in this case, because the evident cause of the affection, the amount of enlargement with the moderate extent of constitutional disturbance, and the jaundice and ascites, which are seldom marked attendants of carcinomatous disease, and the general aspect of the patient, do not encourage this view of it.

I exclude the idea of either fatty or waxy liver, from the fact that neither of these forms of disease of the liver is attended with jaundice, nor with dropsical effusion, as a general rule, or at least only to a moderate extent, nor with turgescence of the superficial vessels of the abdomen—nor do we have any great enlargement of the organ in either of these two forms of disease.

I do not look to the spleen, nor to chronic peritonitis, as the cause of the effusion into the abdomen, simply because these affections seldom produce jaundice to such an extent, nor any great amount of effusion, and because we have in the liver most prominently a sufficient cause for both the jaundice and the dropsy in that cavity.

But, as before remarked, we may have a state of the liver different from either of these, in which we have neither exudation of lymph, nor deposit of carcinomatous matter, nor of fat, nor the peculiar change known as waxy liver, but a morbid deposit which does not become organized, analogous to what we have poured out in erysipelas and rheumatism, and which may be removed by absorption, and eliminated with the natural secretions—and this I suspect to be the nature of the case before us, a state of hyperæmia of the parenchyma of the organ with some of those forms of albuminoid degeneration connected with mal-assimilation, and which afford chance for the effect of remedies.

With this view of the pathology of the case, what should be our plan of treatment? There is evidently no call for depressing means. The first thing which presents itself is the urgent necessity of an entire abstinence from stimulating drinks. This, therefore, with rest in a recumbent position, and a farinaceous diet, constituted our first prescription; and, as before remarked, under this regimen, without any medicine of any kind, there was a great and immediate increase in the quantity of urine discharged. The bowels also became somewhat loose, probably owing to the return of secretion of bile into the intestinal canal, for which a few grains of opium were given. The patient himself soon appreciated the favorable change in his feelings connected merely with this change of his mode of life, without medication. The effect of abstinence upon the liver is well illustrated by the contrast in the two following cases, the record of which I met with a short time back—in a healthy male, twenty-seven years of age, who was killed by a fall from a scaffold while the stomach was full, the weight of the liver to the whole weight of the body was in the proportion of 1 to 26.5; while in a man of twenty-five years of age, who died of tetanus, after three days of complete abstinence, the proportion was only as 1 to 40. Hence the practical importance of rigid diet in chronic congestion of the liver.

As this is a case of perverted nutrition rather than of either purely sthenic or asthenic disease, we will select our remedial means from those articles which are known to have a decided effect in hastening metamorphosis of tissue within the body and eliminating effete matter from it, and to this class it is now known that alkalies and their carbonates especially belong. Liquor potassæ, nitrate, and acetate, and carbonate of potash, and also carbonate of soda, possess this property, but there are some reasons why ammonia is still more effectual, and experience has shown that the hydrochlorate of this alkali possesses the property of dissolving the protein elements of the blood. The remote effect of this salt is sedative, as has been remarked

by an English writer, and, as he says, it not only arrests inflammation, but by its resolvent and secretory power, removes the products of inflammation from the system. This remedy is sometimes combined with the iodide of potassium with much benefit in certain cases which we cannot now stop to particularize, and is often a valuable substitute for mercury. We will therefore direct it to be given in doses of five grains, three times daily, and the tincture of iodine to be painted over the region of the enlarged liver, and watch the effect of this plan of treatment.

PARALYSIS OF THE TONGUE. (?)

Our next case is one of inability (apparent at least) to protrude the tongue, and inability (or at least indisposition) to articulate distinctly more than a few monosyllables at a time, in a stout, healthy-looking Irish laborer, 35 years of age, who entered the hospital on the 14th of June. He had always enjoyed good health, with the exception of having had typhus fever about ten years ago, until the afternoon of the day of his admission, when, while working within doors, and not having been drinking, nor exposed to the sun during the day, he suddenly fell to the ground insensible and unconscious, and was in that condition when brought here. He had no convulsions, and when first seen, his surface was warm, pupils normal, pulse about ninety and regular, the sounds of the heart and respiration both normal. There was no paralysis of his limbs. He had been rather in temperate until about two months previous, when he ceased drinking entirely. He never had venereal disease. Has never had an attack similar to this. Bowels have generally been regular. He was ordered a stimulating injection, and a blister to the back of the neck. The next day his condition was so far improved that he was slowly returning to consciousness, but it was found that he could not or would not protrude his tongue, nor utter a syllable. His intellect seemed to work slowly, although he apparently comprehended whatever was said to him, and answered questions by movements of his head. He was able to walk, his sight and hearing were unimpaired. He slept well, his appetite was good, and bowels regular, and all his physical functions were well performed. He was allowed to remain without treatment until he came under my care on the 1st of July, seventeen days after the attack, at the end of which time a moderate but decided improvement had taken place. His intellect was then more clear than immediately after the attack, and he could imperfectly articulate a few monosyllables, but could not or would not protrude his tongue. He was able to walk about the grounds, and complained of nothing but loss of speech. His taste was unaffected, and the tongue was sensitive to the prick of a pin.

In the uncertainty as to the true pathology of the case, and assuming the possibility that there might have been some effusion along the track of the hypoglossal nerve at the time of his unconsciousness, and in view of the well known alterative effect of mercury, and especially in combination with iodine, I directed him to have half-grain doses of the proto-iodide of mercury, with one grain of extract of conium, night and morning—and now, after the use of this prescription for six days, he can apparently articulate a little more distinctly, though still only in monosyllables, and for the first time protrudes his tongue, when directed to do so; and you will notice that he protrudes it at full length at once, and with a rather sudden motion, and withdraws it with equal rapidity.

What is the nature of this case? Is it one of paralysis of tongue, produced by pressure upon its muscular nerve or thickening of its sheath, or is the trouble in the brain itself, and owing to a want of nervous power to control and direct the motions of that organ? Paralysis of the tongue is a symptom which we quite frequently find connected with lesion of other parts of the brain than the origin of this nerve, but rarely, in my experience at least, occurring independently of that lesion. Entire loss of speech is a common accompaniment of an attack of apoplexy, with hemiplegia,

attended with loss of consciousness; but as consciousness returns, the patient is able to protrude his tongue without difficulty, though it is frequently drawn to one side. Slight paralysis of the tongue, marked by indistinctness of utterance, is sometimes a precursor of general paralysis, or of hemiplegia.

If this condition depends upon paralysis of any nerve, the one affected is the hypoglossal, the nerve of motion, or muscular nerve of the tongue; for we have seen that both taste and common sensation remain normal, and therefore the nerves upon which these functions depend are intact.

The partially unconscious and semi-cataleptic state in which our patient continued for several days, and from which he can now hardly be said to have entirely emerged, as evidenced by the dull expression of countenance, even at present, and more particularly his indisposition to make any special exertion to protrude the tongue and move it in articulating words, would seem to indicate that the trouble is rather in the brain itself than in any lesion of the hypoglossal nerve—a view of the case which would seem to be strengthened by the mode in which the tongue was protruded, not by a series of gradual changes for the better, showing themselves from day to day, but extending it at full length at once, and as rapidly retracting it.

But you may ask whether this change was not to be fairly attributed to the remedy used, under which changes are supposed to take place in the brain, especially in deposits and thickening from syphilitic disease, which are followed by more or less return to a healthy state. I think not in the present case—first, because the time is too short for such an effect; secondly, there is no evidence of any syphilitic taint; and thirdly, the change was sudden, not gradual, as we should expect it to be, if produced by the remedies used.

Original Communications.

GUNSHOT WOUND OF LEFT LUNG.—DISLOCATION OF HEAD OF HUMERUS.—CONGENITAL PHYMOSIS; OPERATION.

By DEWITT C. PETERS, M.D.,

ASSISTANT SURGEON U. S. ARMY.

SEVERE GUN-SHOT WOUND OF THE LEFT LUNG—RECOVERY.

H. S., Jr., aged 19 years, a conductor on the California Overland Mail Stage Route, was wounded at Fort Davis, July 29, 1860, in the following manner: He was taking a Sharpe's carbine from a coach, and in doing so, imprudently seized the weapon by the muzzle and attempted to draw it from its resting-place. The consequence was that the hammer of the lock caught on some obstacle in its progress, and the gun being loaded, discharged a "slug," weighing half an ounce, which entered the left breast, between the fifth and sixth ribs, one inch and a half below and a little to the left of the nipple. Its course was then backwards, downwards, and inwards, the point of exit being on a line with and about one inch and three-quarters below the lower angle of the left scapula. The patient when wounded, was standing on the ground and within three feet of the mouth of the piece. The ball made its entrance and exit through the intercostal spaces without doing any apparent damage to the neighboring ribs.

Being the only surgeon at hand, I was consequently sent for. I found the sufferer much prostrated, verging on collapse, with a pulse scarcely perceptible, blanched skin, and cold extremities. On placing my ear over the region of his heart, a peculiar feeble rumbling sound could be heard, which made me fear lest that organ might be wounded. He was, after this hasty examination, placed in a more comfortable position, and such stimulants as brandy and carb. ammonia were freely given, while sinapisms

were ordered for his extremities. The clothing covering the wound was speedily but carefully removed, by the aid of a pair of scissors. The integument around where the ball entered was much blackened by powder, thereby showing the closeness of the weapon when discharged. Protruding from the anterior wound were some shreds of a woollen shirt, which were carefully removed, and the finger introduced to explore the adjacent intercostal arteries, which, however, fortunately were found sound. A probe being next inserted, readily followed the track of the ball, through the substance of the lung as before described. Respiration in the injured lung at first could be distinctly heard, accompanied by a loud crackling and gurgling sound; but as reaction came on, this noise gradually became more and more obscure, until the organ, from coagulated blood and congestion, seemed to be one solid mass. From the posterior wound there oozed a continuous stream of dark and thin bloody material. On exploring the neighboring intercostal arteries they were also found uninjured. Air escaped from the lung into the cellular tissue covering the chest, causing emphysema, which soon became circumscribed as the respiration ceased on that side. Both wounds, after being thoroughly cleansed, were dressed with simple cerate spread on pieces of lint, and held in place by strips of adhesive plaster. Over the lint two very soft pads of tow were placed, and the whole confined by a broad body-bandage snugly pinned. Under the influence of the stimulants, sinapisms, and artificial heat, reaction came on and the sufferer was carried on a litter to the Hospital, where, finding that his bladder was overdistended, it was emptied by a catheter. *July 30.*—The patient continued to take his stimulants until his pulse became strong and full, and his skin had regained its temperature. The carb. ammonia and brandy were then stopped, and wine whey substituted. His respirations are hurried and labored. He complains of intensely sharp pain in the wounded side, and especially so on attempting to take a long inspiration. Towards morning a short, hacking cough set in, accompanied by a few scanty expectorations of clotted blood, this being the first of that material which had yet escaped from his mouth. The pulse is 102, intermittent. The heart continues its remarkable rumbling sound, but to a louder degree than then. This can only be accounted for by supposing that this organ has received some injury, either directly or otherwise. The respiration cannot be heard in the wounded lung, nor can the air be detected entering the larger bronchi. Percussion gives a flat sound. From the posterior wound there oozes still the dark bloody discharge, which has now amounted to several ounces, yet the wounds themselves look as well as could be expected. The emphysema has not extended, but rather has decreased under the influence of the bandage, etc. The patient now passes his urine voluntarily, but it is scanty and high-colored. After cleansing the parts, it was thought best to apply a good-sized blister over the chest to act as a prophylactic against inflammation. The other dressings employed were of the same kind as were used yesterday. Beef tea, wine whey, and barley-water were continued. At night active febrile symptoms made their appearance, when the wine whey and beef tea were suspended, and spirits of Mindcrerus, with small doses of Dover's powder, were substituted. *July 31.*—He has slept somewhat during the night, but at times was delirious. The sharp pain in the side continues unabated, and hinders his taking a long breath. His pulse ranges 106, and is more regular and stronger. The heart is regaining its regular sound and impulse. There can be but little change detected in the condition of the lung since yesterday. The wounds present a favorable appearance, and are beginning to clean off, while the bloody discharge from the posterior one is less in quantity, and altered in consistency and color. The expectoration is more tenacious, and still is streaked with blood. The wounds will be dressed as before and the same internal remedies continued. The bowels having been confined since some time before the accident occurred,

they were opened by a mild aperient enema, and with relief to the patient. *August 1.*—He rested comparatively well last night, and is evidently much the better for it this morning; has less pain and can breathe much easier. His pulse has fallen to 95, and has lost much of its force since yesterday. The severe cough that has troubled him thus far has become loose, and it is followed by a mucous expectoration of a dark color, but in which no blood can be seen. His tongue is coated by a thin white fur and is moist, while his skin is of a good temperature. On placing the ear to the chest the respiratory murmur can be clearly detected in the apex of the left lung, accompanied by a mucous rattle. The discharge from the wounds begins to assume the characteristics of pus, and is quite free. The blister filled well a few hours after it was applied, and is yet performing its mission thoroughly. The *spiritus Mindereri*, Dover's powder, and more stimulating diet continued, with the addition of cooling drinks, as effervescing draughts, etc. *August 2.*—The patient had but little cough to trouble him. The natural respiration in the wounded side is gradually returning. The pulse remains still frequent, being 92 beats in a minute, but yet it is regular and easily compressed; the sputa has a slight brownish tinge. The wounds are commencing to rid themselves of tough pieces of slough. He is now taking a mild stimulating expectorant combined with tonics, and a more generous diet than heretofore is allowed him. The local dressings are much the same as used from the first. *August 14.*—Since the last date the patient has continued to recover without any untoward symptom intervening, and is now able to sit up and move about the ward. The wounds are fast contracting and healing up. At one time one of the glands in the left axilla threatened to suppurate, but the ordinary means used in these cases prevented this accident. He is now taking cod liver oil and *syr. iod. ferri*, with marked improvement. The respiration in a great portion of the wounded lung is re-established, and differs but little from that of its fellow. *August 25.*—The patient is now entirely recovered, and his wounds having both healed, he is discharged cured.

Remarks.—One of the most singular phases in this case was the close proximity of the wound to the heart and great vessels without serious damage to either. The rumbling sound and the irregular impulse of the heart, which lasted two days after the accident, might have been the consequence of a contusion of the heart, or it might perhaps more probably have resulted from the sudden shock to the nervous system. Speculation could dwell on these two points; nevertheless we are here again made to believe that even the heart can now and then receive rough usage without ultimately causing death. This extensive wound to the lung substance, followed by recovery, would not by itself be the subject of great surprise.

DISLOCATION OF THE HEAD OF THE HUMERUS OF SEVERAL DAYS' STANDING, THREATENING PARALYSIS OF THE ARM.

Mr. W. R. H. of New York, aged 45, a passenger in the Overland mail, while on route for New Mexico, during August, 1860, was upset in a mail stage, and suffered the above injury to the right arm. The accident happened five hundred miles from Fort Davis, and the patient was obliged to travel that distance before he could obtain surgical advice and treatment. On examining the arm I found it very much swollen, cedematous, and discolored by extravasated blood. The acromion process on that side could be felt, and beneath it there was an absence of the head of the humerus from its natural position which, however, without much difficulty could be detected resting in the axilla. The patient was unable to flex his forearm on his arm, or raise his hand to his head. Mr. H. states that he has travelled five days and nights with affairs in the condition herein described. At the start he was inclined to believe that his shoulder had received some severe injury, such as a dislocation, but his friends insisted upon it that it

was a severe contusion. He says he has slept very little since the accident happened, and that for some hours he suffered intense pain. However, this gradually disappeared, leaving in its stead a sensation of numbness which, on his arrival, amounted almost to paralysis. During his journey he has been compelled to let the limb hang suspended by his side, it being the easiest position he could place it in, and the consequence was that every jolt tended to increase the injury and swelling, therefore on his arrival it was nearly double the size of its fellow. The relaxed condition of the patient rendered it unnecessary to use any anæsthetics. Hence, without further delay, his coat, vest, and shirt were removed, and he was requested to lie on his back. By the aid of two strong men making extension, with my foot in the axilla making counter-extension, the reduction was accomplished after considerable exertion on the part of the operators. I next proceeded to loosely bandage the limb from the fingers up to the shoulder, and then confined it across the chest in a semi-flexed position, and ordered evaporating wash which should be constantly kept applied. A full dose of opium was administered, and under its influence he quietly fell asleep. The patient remained at this post undergoing treatment for several days. The swelling and ecchymosis slowly disappeared under bandaging, the use of stimulating liniments, and the shower bath. Not so with the paralysis, which still persisted, and it was not until one week had passed before it yielded in the least. On once beginning to recover from this bad symptom, everything went on favorably and rapidly, until he felt himself strong enough to resume his journey.

Remarks.—During a three years' pupilage in the New York Hospital I enjoyed the privilege of witnessing many cases of the reduction of dislocation of the shoulder into the axilla, and since then in different institutions both in this country and abroad, as well as in my own practice, I have seen a goodly number of the same accident, but I do not remember one where the paralysis was so marked or so difficult to overcome as in the case I have above related. There is every reason to believe that had the patient continued on his journey for even two or three days longer he would have permanently lost the free use of his arm, or at the best it would have taken a long time for him to have regained its muscular and nervous power.

CONGENITAL PHYMOSIS, GONORRHOEA, AND INFLAMMATION OF THE GLANS PENIS, FOLLOWED BY ADHESION OF THE PREPUCE TO THE GLANS.—OPERATION, ETC.

Patrick O'C—, aged twenty-six years, and of good constitution, a soldier in the U. S. army, presented himself to me, Aug. 1860, and complained that he passed his urine with great difficulty, owing to some obstruction in its progress. An examination revealed the fact that the prepuce had so contracted over the mouth of the urethra, that it seemed almost impossible for the urine to escape in a stream of any size. The opening in the prepuce had become so reduced by cicatrization that it would hardly admit of the introduction of an ordinary probe, and by its position it naturally acted like a valve to the flow of urine. On further investigating the parts I found that the prepuce adhered firmly to the glans, and no longer freely moved as it was wont to do. The patient states that six years ago he had gonorrhœa, and that during the progress of the disease he resorted to the use of strong nit. of silver injections for its cure. The glans being excoriated and inflamed he several times threw the injection under the prepuce, as well as in the urethra, but experience taught him that this was a painful business, and he was obliged to desist on account of the "swelling and redness" that supervened and alarmed him. The gonorrhœa yielded to his remedies, but the soreness of the prepuce persisted for some time, and only quitted him when it had fairly cemented together. He says, even since his recovery from the gonorrhœa the opening in the prepuce has been gradually contracting, and it has been a source of great annoyance to him, as the skin has been in

a state of constant irritation, which can readily be accounted for by the force necessary to expel the urine through so small an aperture.

Treatment.—A free incision through the integuments was made, along the dorsum of the penis, for the extent of about one inch. The flaps thus formed were each dissected back so as to expose the entire glans to view. A few bleeding vessels required to be twisted, and then dry lint was inserted between the raw surfaces so as to prevent adhesion again taking place, and over the whole cold water dressings were directed to be kept constantly applied. By carefully watching the healing process, and keeping the lint in its proper position, cicatrization rapidly went on, and in ten days' time the organ presented something of its natural appearance, and the obstruction to the flow of urine was entirely overcome.

Fort Davis, Texas, Oct. 1860.

Reports of Hospitals.

ST. LUKE'S HOSPITAL.

SERVICE OF DR. BUMSTEAD.

GUNSHOT WOUND OF ABDOMEN—LACERATION OF THE LIVER, GALL-BLADDER, AND RIGHT KIDNEY.

[Reported by EDWARD B. DALTON, M.D., Resident Physician.]

A MAN, 25 years of age, a muscular laborer, was received into the accident ward of the hospital on October 23, 1860, at 2.30 P.M. At 9.30 A.M. of the same day he had received a gunshot wound. A rifle-ball had pierced the abdominal walls one inch and a half to the right of the median line in front, midway between the lower edge of the ensiform cartilage and the umbilicus. It had emerged five inches to the right of the vertebral column and one inch above the crest of the ilium. On his arrival at the hospital, five hours subsequent to the accident, the patient's condition was as follows: Pulse ninety-two and of moderate strength; respiration thirty per minute; surface warm and natural; countenance clear and consciousness unimpaired; moderate pain and tenderness over the abdomen, the walls of which appear unusually full; suffers also from thirst; lies more comfortably upon the wounded side; blood trickles slowly from anterior wound—none from posterior. A bladder filled with crushed ice was applied over the anterior wound—and pulv. opii, gr. ij. immediately administered. There had been no evacuation of urine since the accident. On passing the catheter, some difficulty was experienced at the entrance of the bladder. This being overcome, a moderate quantity of dark-colored urine, subsequently found to contain a small amount of blood, was withdrawn. The same unusual amount of constriction was felt in withdrawing the instrument. One hour subsequent to the first administration of opium a third grain of the drug was given. Half an hour later the patient vomited some five or six ounces of fluid containing a large proportion of bile; while at each effort blood was forced from the anterior wound. He complained again of a great desire to urinate, and the catheter was passed with the same result as before, except that the quantity of urine evacuated was much less; only two or three ounces. From this time up to that of his death he continued to pass small quantities at intervals of an hour. The vomiting now occurred so frequently as to render it useless to give more opium by the mouth. The patient complained very much of pain over the abdominal region, which had now become very tense and dull on percussion, a condition which steadily increased until death. He also complained of a desire to defecate, and a full purgative enema was administered, but without beneficial result. Twenty-five drops of Magendie's solution of morphine were given per rectum, by which means

an interrupted sleep of several hours was induced; meantime the pulse had risen to 172 per minute, the respiration to forty; no marked change in the symptoms was noticed during the remainder of the night. At 6.30 A.M. of the day following the accident the patient, after replying to a question, made an effort to turn in bed, and suddenly expired.

Autopsy, five hours after death.—Rigor mortis moderate. Abdomen distended and dull on percussion. An incision along the median line shows slight extravasation of blood in the subcutaneous tissues near the anterior wound, and continued still further discloses the peritoneum firmly stretched and of a dark color. On puncturing this membrane a jet of blood is thrown from the opening, and the peritoneal cavity is found crowded with blood, mainly in a fluid condition, and having a slight intermixture of air. The surface of the intestines is deeply stained—old peritonitic adhesions are noticed in the left iliac region. There is a lacerated wound of the liver involving the right lobe close to the longitudinal fissure. The upper wall of the gall-bladder is torn, and its cavity filled with coagulated blood. The right kidney has a lacerated wound on its outer aspect, and the substance of the organ is infiltrated with blood. The bladder is strongly contracted, and its internal coats give evidence of chronic inflammation.

BROOKLYN MEDICAL AND SURGICAL INSTITUTE.

CLINICAL CASES IN THE SERVICE OF PROF. LOUIS BAUER, M.D.

[Reported by CHARLES E. HALSEY, M.D.]

CASE 1. Morbus Coxarius—Entire Resection of Caput Femoris—Removal of Portions of the Acetabulum—Recovery.—The patient, Charles Skinken, came under observation on the 3d day of April, 1860, and having been thoroughly examined, Dr. Bauer prefaced the operation by the following remarks:—The staff of this institution has invited your attendance in order to witness an operation which presents some features of scientific and practical interest. The patient, whose history we shall consider, is a little boy six and a half years of age. Although descending from healthy and robust parents, and once himself of unqualified good health, he appears before you in a most emaciated and anæmic condition. This, however, will not surprise you, when you learn that with the interruption of one year, he has been the subject of intense suffering from an affection of his right hip-joint for the last three and a half years. The disease might have existed five months when the patient was placed under my care. At that time the affected limb was already elongated, everted, and abducted with corresponding obliquity of the pelvis. The joint was exceedingly painful on motion, *counter-coup*, and pressure. The constitution was greatly affected from the want of appetite, rest, and unremitting febrile excitement. This briefly was the condition in which the patient was admitted, and you will perceive that we had to deal with the second stage of hip-joint disease. The quantity of inflammatory effusion could not have been great, since it was not perceptible on pressure made along the posterior ridge of the cotyloid cavity, nor was the mobility of the joint entirely suspended, for passive flexion and extension could still be performed. The parents were unable to assign any particular cause for his affliction. Hereditary scrofula seemed to be out of the question. The child had been reared under a good dietetic regimen, was robust, lively, and presented no marks of dyscrasia. The faint possibility of a scrofulous taint was duly regarded in the subsequent treatment, the greatest attention, however, being paid to the local trouble. By repeated, moderate local depletion, and absolute rest in the wire apparatus (which I have planned and used with good success), we were able to subdue pain; the appetite also improved. Thus the case had proceeded favorably for some months, when the patient was lost sight of.

After the lapse of about six months he was again placed

under treatment—the disease being, however, in a more advanced state, the articular effusion and all the other symptoms having increased. During the interval the patient had been without medical aid except for a time, when he was treated in the New York Hospital. Up to this time the disease had remained in the second stage—i. e. the capsular ligament had not yet been ruptured. This was, however, so much distended as to make a rent almost inevitable, and this fact induced us at once to puncture the joint. In doing so we removed about eleven drachms of a sero-purulent liquid, whereupon the joint could be moved in every direction, without evincing any crepitus, and we could to a certain extent correct the malposition of the extremity. No disagreeable results followed the operation; on the contrary the patient was materially relieved. A few weeks after, the recurring symptoms made it conclusive that a reaccumulation had taken place. The joint was opened by a subcutaneous incision after the plan of Goyrand, with a view to establish a more permanent outlet into the areolar tissue. The result was satisfactory. The patient remained for some time after at the Institution, for the purpose of having his limb properly exercised. When discharged the joint was easily movable, and in pretty good condition, and the patient was taken into the country. During the succeeding year, I heard from him but once, when he was progressing favorably. When he was subsequently presented to us, his father stated that he had enjoyed excellent health, and had been free from all ailment in the affected limb; but that within the last month he had sustained a fall upon the same hip, which had reproduced disturbance in that joint.

On examination he was found to be feverish; the hip swollen, tender, and puffy; the extremity shortened about two inches, inverted, adducted, and flexed at the hip. A diffuse abscess below the glutei muscles was also discovered. The boy being put under chloroform, crepitus in the joint and contraction of the pectineus muscle was noticed. Thus the disease had assumed a more formidable character and extent. For more careful treatment the patient was again placed under our care, when the abscess was opened, the contracted muscle subcutaneously divided, and the patient placed in the wire apparatus. My colleagues coincided with me in the propriety of giving the patient a chance of spontaneous relief from the caries, postponing a more radical operation until circumstances should demand it. The subsequent improvement was so rapid, the patient so comfortable, and his general appearance so encouraging as to inspire us with a hope of successful termination. However, after the lapse of six months the case was far from satisfactory. From time to time new abscesses had formed in the neighborhood of the joint whilst old ones had closed. So long as the discharge was free he felt comparatively comfortable, slept well, had a good appetite and was cheerful. But new abscesses, of course, brought new troubles, and corresponding emaciation. Finally, we concluded that further delay would be tantamount to resigning the patient to his inevitable fate, and therefore the operation of exsecting the carious portion of bone was decided upon as the only alternative. This case may be looked upon as a fair trial, illustrating how far nature may be relied upon in articular caries. It should be borne in mind that during all this time the patient had received more than ordinary attention, and had been visited by other surgeons, in whose skill and devotion we place the most unqualified reliance, and yet the disease progressed. Some eight weeks ago the operation was mooted, when the patient was in better condition, and I regret that we did not proceed at once with it, for with delay we have gained nothing, whilst the disease has decidedly advanced. In cases similar to this, we hear experienced surgeons counsel to wait until the patient has acquired strength enough to bear the operation. Such counsel, permit me to say, is quite out of place, and I submit the question, How can a patient improve, with appetite, digestion, and rest impaired, and whose system is progressively debilitated by an extensive and continuous drainage?

The decreasing weight alone would be sufficient to indicate the fallacy of the advice of temporizing.

Operation.—In the presence of Drs. Lewis A. Sayre, Stephen Smith, Daniel Ayres, Krackowizer, Whaley, and others, Dr. Bauer proceeded to exsect the head of the thigh-bone. A single incision was first made directly behind the great trochanter, to the extent of about five inches, and sufficiently deep to fully expose the articulation. The capsule was then entered and laid open along the entire posterior margin of the acetabulum. The ligamentum teres being totally destroyed by previous suppuration, the dislocation was readily accomplished. The carious portions of the joint were carefully and effectually removed by the gouge and rasorium, for the success of the operation depends upon the thorough removal of all detritus. It being desirable that the wound should heal by the *second intention*, it was well plugged with lint, and the patient placed in the wire apparatus, in order to secure rest and proper position.

August 10.—Since the operation was performed no untoward symptoms have interfered with the healing process of the wound, which is now almost entirely closed, requiring but occasional dressing. The general condition of the patient has steadily improved. His appearance is better, and his weight materially increased. The affected leg is about one and three-quarters inch shorter. The intermediate substance formed in place of the removed bone is about two and a half inches in length, firm, and of sufficient strength to sustain the weight of the body. It is immediately connected with the shaft of the thigh-bone freely moving upon the acetabulum, at which place it seems to be enlarged and flattened.

In the after treatment of this case Dr. Bauer has used Dr. Sayre's splint with excellent results.

The patient was discharged from the Institute some two months ago, being then in a condition which did not require further surgical aid.

CASE II.—Morbus Coxarius—Removal of Carious Bone—Recovery.—Joseph Barnitt, æt. 6 years, was presented at the Institute on the 7th of April, 1860. The condition of the patient was as follows: General debility; body much attenuated; febrile excitement; impaired appetite, and irregularity of the bowels; right leg shortened, adducted, and inverted; pelvis tilted upwards and backwards; right nates considerably swelled, and indistinctly fluctuating; motion of hip-joint greatly impeded, especially on abduction, owing to contraction of the adductors. This condition, for which there was no assignable cause, had been coming on for about three years. The child had several times fallen down a steep stairway, but no untoward symptoms immediately followed. The parents of the child both enjoy perfect health, and are unable to trace any strumous or tuberculous troubles. Diagnosis: Morbus coxarius, third stage, with abscess extraneous to the joint, and probable caries within the joint. Dr. Bauer proposed to cut down upon the abscess situated beneath the glutei muscles, examine then the state of the articulation, and in case of caries, to remove it in the most fitting manner. To this plan the father assented. In presence of the medical officers and invited gentlemen the operation was proceeded with in the method already described in the previous case. The incision was carried down into the abscess, and exposed the joint, which was found to be opened at its posterior circumference and extensively carious. The incision was therefore enlarged, the head of the femur dislocated, and all carious bone effectually removed. The ligamentum teres had been destroyed by ulceration. The whole operation occupied but a short time, no vessels requiring ligation. Having been properly dressed, and the wire apparatus adjusted, the patient was placed in bed. Since the operation everything has gone on finely. On the 5th of August, after four months' treatment, the patient was discharged from the Institute in the following condition: General health good, sleeps and eats well, and has regular alvine evacuations. The wound is not entirely closed; the

remaining opening which is about the size of a three cent piece is surrounded by oedematous margins, signifying no doubt that some slight exfoliation is still in process; otherwise the region of the joint is perfectly healthy, except that for want of the trochanter major the hip is rather flattened. The intermediate substance is about two and three-quarter inches in length, quite firm, closely connected with the shaft, but moving on the acetabulum. The limb is but three-quarters of an inch shortened, and in good position. At present the patient wears Dr. Sayre's instrument, and in all practical points is considered convalescent, with a useful extremity. It may be noticed here that the child has taken no internal medicines, but that great attention has been paid to his diet, which has always been most digestible and nutritious.

BROOKLYN CITY HOSPITAL.

SERVICE OF PROF. HUTCHISON.

THREE CASES OF ORCHITIS, TREATED BY INCISION INTO THE TUNICA ALBUGINEA TESTIS.

[Reported by A. D. WILLSON, M.D., House Surgeon.]

Case 1.—M. L. Seaman, admitted into ward 20, March 16, 1860, with orchitis, which appeared five days before, after the suppression of a gonorrhoeal discharge. The testicle is four times its normal size and intensely painful. He was treated with tobacco poultices, mercurials, etc. etc., for eight days, when the gums became touched, without the slightest improvement; the pain was so intense that he could not sleep. On the 24th of March, Dr. Hutchison made an incision three-quarters of an inch in length over front of testicle, down layer by layer through the tunica albuginea so as to lay bare the gland. On the following day the patient stated that he had been entirely free from pain since the operation; he had slept well at night for the first time since he entered the hospital; the swelling is subsiding; wound allowed to heal by granulation. Two days subsequent to the operation, the discharge from the urethra returned. April 10.—Wound has entirely healed, and the testicle has regained its normal size and sensibility.

Case 2.—Peter G., aged 37, seaman, admitted March 14, 1860, with hydrocele of the left side of four weeks' duration. On the 17th, an iron-wire seton was passed through the tunica vaginalis; this was followed by some inflammation which terminated in suppuration, the pus being evacuated by an incision. On the 5th April, the parts on the left side had regained their natural condition, but the right testicle had become swollen and painful. The ordinary treatment for orchitis having been used for two days without relief to the intense pain, an incision three-quarters of an inch long was made very carefully down to the body of the testis. This gave almost immediate relief, and at the end of two weeks the testicle had resumed its usual size, and the wound had entirely healed.

Case 3.—James G., 26, seaman, admitted April 12, 1860, with orchitis, of twelve days' duration, which followed the suppression of a gonorrhoea. The testicle is considerably enlarged and very painful. He had local depletion, tobacco, poultices, mercurials to pyalism, etc., without benefit. April 16.—The tunica albuginea was divided as in the preceding cases, and with the same relief to the swelling and excessive pain. He eloped on the 28th, cured.

Remarks.—The above operation, originally proposed by J. L. Petit, was revived, and has been practised by M. Vidal de Cassis in more than four hundred cases with success. In the above cases, it was in the highest degree satisfactory—relieving at once the excessive pain arising from the strangulation of the inflamed organ by the unyielding albuginea, when all the usual remedies had failed. Dr. Hutchison makes the incision through the tunica albuginea with great care so as to avoid wounding the seminiferous tubes, which might lead to the establishment of a seminal fistula.

Clinical Record.

NEW YORK MEDICAL COLLEGE.

PROF. CARNOCHAN'S CLINIC.

OCT. 4, 1860.

[Reported by F. O'DOWN.]

CASE 6. Cancer of the Glands of the Neck.—Prof. Carnochan remarked that the patient presented a typical case of cancer of the cervical glands. It differed from the benign tumor (which was isolated) in its pervading all the tissue. This patient is treated with a plaster of conium. There is no therapeutic agent known which will effect a perfect cure, though the disease may be mitigated. His pulse is 116, and irritable. The pulse is the criterion of organic disease. If there is general emaciation, loss of appetite, and the functions of the system are imperfectly carried on, and the pulse is over 110, you may look for organic disease either of the lungs, liver, kidneys, the brain, or other kindred organs.

UNIVERSITY MEDICAL COLLEGE.

PROF. W. H. VAN BUREN'S CLINIC.

October 31, 1860.

STRICTURE OF URETHRA. ANEURISM BY ANASTOMOSIS. CARCINOMA OF THE BREAST.

CASE 2. Stricture of Urethra.—H. O., 38, has difficulty in passing water, which has been increasing for the last three years; the calls are more frequent than natural, the stream small, and the time required to empty the bladder longer than it should be. Patient has had gonorrhoea more than once, but is disposed to attribute his trouble to a fall astride of a ladder six years ago, in which he bruised his perineum, and at the time passed some blood in his urine. Has had instruments introduced into his bladder at Bellevue Hospital by which his stream was enlarged, and his ability to pass water improved; but when any time passes without the use of the instrument, the difficulty has recurred. On introducing a full-sized steel sound, an obstruction which could not be passed by gentle pressure and careful manipulation was found about five and a half inches from the orifice, and another, which could be passed, was recognised at about two and a half inches down. Small instruments were then tried, and with some difficulty a No. 5 was passed into the bladder.

Diagnosis.—This man has organic stricture, and there is evidence in the perineal bruise and subsequent bleeding that it may be, in some degree, traumatic; but he has also had gonorrhoeal urethritis, and a second stricture forming in the anterior portion of the canal which could hardly result from injury, and is much more likely to be the result of gonorrhoea. Moreover, six years have elapsed since the fall across the ladder, and it is only recently that narrowing of the stream has forced itself upon his attention. Now, traumatic strictures are generally rapid in their formation, depending as they do upon the contraction of a wound or laceration of the walls of the canal; whereas strictures following gonorrhoea are, as a rule, slow in their formation, not attracting attention, frequently, until several years have elapsed, and their cause, perhaps, willingly forgotten. In the present case I should lean to the opinion that the strictures were, probably, gonorrhoeal in their origin, the lower one possibly complicated by the effects of the bruise. If there is anything traumatic in this case, it makes the prognosis more unfavorable.

Treatment.—I should employ dilatation in this case, at all events until I had ascertained the temper of the patient's urethra, and the degree of dilatability of his strictures; introducing the steel sound, as I have just done, every third or fourth day, allowing it to remain in the canal about five

minutes each time, and gradually increasing its size as the stricture yields.

CASE 3. Aneurism by Anastomosis.—A little child, four years old, was presented with the above in the form of a small tumor on the left side of the nose. The part had, the week before, been burned with hot needles, the requisite amount of tissue not being destroyed for fear that a larger scar than was necessary would be left. The operation was repeated.

Remarks.—These tumors result from a congenital defect in the organizable vessels of the part. When they increase to a large size, as they not unfrequently do, they are liable to become ulcerated in consequence of their defective nutrition. These ulcers are very prone to bleed, more especially if the tumor is one in which the arterial element predominates. When this state of things exists, it constitutes what the French call *fungus hæmatodes*. I have seen it develop itself around the throat and neck, where it was impossible to get at it with any instrument. In that case injection was made with the persulphate of iron by Dr. Halsted at the N. Y. Hospital, with great benefit. The mode of using this is to introduce threads saturated with the preparation, through the substance of the tumor. You have thus a double curative influence, the coagulation of the blood and the inflammation established by the threads. I have found, however, that this treatment is not always successful; that the blood only in the track of the thread becomes coagulated, while the other portion of the tumor is unaltered. I now place my reliance upon the hot-needle. The punctures are made at a greater or less distance apart, accordingly to the vascularity of the tumor.

CASE 4. Carcinoma of the Mamma.—A female, 48 years of age, presented herself with the following history: "She has had eleven living children and one miscarriage, and about seven or eight years ago suffered from a milk abscess in her left breast. She is perfectly regular in her menstrual periods, and has no hereditary predisposition to cancerous disease. About two years ago she first noticed the appearance of a hard lump in her left breast, and in the course of a few months the organs of the opposite side became similarly affected. On examination of the diseased portions, they are found to possess an extreme degree of hardness; there does not seem to be any enlargement of the glands in either axilla, though in the right side the lymphatic trunks seem to be more or less affected. The shape of the left mamma is very much altered, being shrunken and corrugated in the position of the nipple, which in its turn is very much distorted. The whole organ is about one-sixth its normal size. With these physical peculiarities there is a certain amount of pain, which is occasionally of a sharp darting character. In the other breast there are two other hard masses, and the nipple is also puckered.

Remarks.—Now in a case of scirrhus of the mamma the question as to the propriety of an operation is one that must always be settled by the circumstances of the case. As a rule, I believe a resort to such a measure does not prolong life. It is true it may afford relief from pain, from the disagreeable odor, and from anxiety of mind; but the growth generally makes its appearance again, either in the same locality or some other portion of the body within the following eighteen months or two years. The operation ought not to be performed under any circumstances unless the whole of the diseased mass or masses can be removed; consequently, in this instance, no relief can be afforded. The hard variety of cancer is most chronic. The breast first attacked was the left, which, from some unexplained reason, is most generally the case. The disease is the result of a heterologous deposit, and takes its origin in a cell growth leading to the formation of tumors which are prone to ulceration. In the left breast, ulceration is imminent. She has had some drops of blood escape from the nipple dependent upon the progress of the disease and the consequent rupture of a blood-vessel.

Treatment.—I advise this lady to have nothing done in the way of an operation, but simply avoid everything that

may tend to bring about ulceration; and when it does take place, to apply to the abraded surface the most unirritating ointments; to attend also to her general health, and submit to the will of God.

PROF. JOHN T. METCALFE'S CLINIC.

Oct. 31, 1900.

CIRCUMSCRIBED PLEURISY.—WRIST DROP.

CASE 2.—Circumscribed Pleurisy.—D. M., set. 24, sailor, native of Ireland, presented himself the week before with pain in the right chest, which was aggravated by cough and inspiration. These symptoms have existed since the 18th of last March, and were the result of exposure to cold. The expectoration is white and frothy; all the other functions of the body are perfectly performed. A physical examination discloses the following facts: The right nipple is a little higher than the left; breathes naturally; no difference of vocal vibration between the two sides; no dulness on percussion as far down as the border of the third rib in front; percussion symmetrical and natural. Below and to the right of the right nipple, about two and a half inches distant from it, is the centre of dulness, limited to a space about two inches square, where there is also tenderness on percussion and pressure; this is the only spot where he complains of pain. Percussion normal over the whole posterior part of the chest, as is also the case with the respiration and voice. Over the dull spot in front there is also feebleness of the respiratory murmur. At the close of the inspiration on the edge of this part there is quite a well-marked friction sound audible, but over the centre of dulness no such sound is recognisable. No abnormal dulness over the hepatic or cardiac regions. Pulse 84; respiration 20.

Diagnosis.—The symptoms might be explained by referring the cause either to bronchitis, pneumonia, phthisis, or circumscribed pleurisy. In bronchitis there is the peculiar expectoration which is present in this case, and also cough, but there is no dulness on percussion. In pneumonia, you have a rusty expectoration, dulness posteriorly, bronchophony, and besides, a disease of short duration. Phthisis would give the following physical signs: marked deformity of the chest; dulness on percussion under one or both clavicles, attended with a want of expansive power; some difference in the vocal vibration of the two sides; prolonged expiration, crepitant râles, hæmoptysis, etc. By supposing it to be circumscribed pleurisy, all the symptoms are satisfactorily explained—the friction sound, or rather the stretching sound, would point to the existence of false membrane, while the dulness would show the presence of a localized effusion. This effusion has probably been quite extensive, and has nearly all been absorbed. The rational symptoms have been such as to make us believe that the effusion is serous in character, unmixed with pus. The prognosis then is good.

Treatment.—Counter-irritation in some form or other is indicated, and in this instance it can be best accomplished by blisters. The administration of calomel is altogether uncalled for in these cases, and is a practice which should be looked upon as hurtful to the welfare of your patient. If the effusion of serum were great in quantity, absorption could be produced by the use of the iodide or bromide of potassium. In this case, however, no such remedy is needed.

CASE 3.—Wrist Drop.—H. McC., painter, 23 years old, has inability to extend the hands upon the forearms, which symptom first showed itself about the middle of May last. At that time he retired one night, after a day's work, feeling as well as usual, but when he arose in the morning, he noticed that his wrists dropped, and since then he has had no control over the extensor muscles. All along the margin of his gums there is distinctly seen the blue line (Burton's). Patient has been attacked, during the last six

years, five different times with colic. These symptoms are in ninety-nine cases out of one hundred, pathognomic of poison by lead. This metal is introduced into the system in various ways, but painters as a class are by far the most liable to its influences.

Treatment.—The object of general treatment in these cases is the elimination of lead from the system, which cannot be better accomplished than by the administration of iodide of potassium. This salt is very soluble, and combines weight for weight with water, so that a solution can be made in each drop of which there is a grain of the remedy. We are thus enabled to give the usual dose, five grains, in as many drops. The patient should also take a good sulphur bath every day. Local treatment consists in maintaining the hand upon a splint, making use of frictions, electricity, and passive motion, in order to keep up the tone of the affected muscles, and thus prevent fatty degeneration of their substance.

JOURNALS FOR OCTOBER.

CHICAGO MEDICAL JOURNAL.—October.

ART. I.—*Notes relating to the extirpation of the Parotid Gland.* By PROF. DANIEL BRAINARD.—A brief notice of the history of this operation, concluding with a list of ninety-one cases, two of which were performed by the author. **ART. II.**—*Chronic Iritis.* By Dr. E. L. HOLMS of Chicago.—Iritis that has healed with adhesions between the lens and iris is almost uniformly subject to relapse, the treatment of which consists in removing about one-sixth of the iris, as in forming an artificial pupil. **ART. III.**—*Nervous Agency in Inflammatory Action.* By Dr. L. S. ELLIS, Chicago. **ART. IV.**—*Diphtheria.* By Dr. A. K. VAN HORN.—The author concludes that the cases seen by him were in reality those of scarlatina. The treatment was sustaining, with diaphoretics and appropriate local applications.

NASHVILLE JOURNAL OF MEDICINE AND SURGERY.—October.

ART. I.—*Clinical Remarks upon Ulcers of the Cornea.* By Dr. C. R. AGNEW, Surgeon to the New York Eye Infirmary. Ulcers of the cornea are common from infancy to old age, and are here divided into irritable, inflamed, and atonic. For the irritable ulcer he regards the nitrate of silver as almost a specific; and this with appropriate constitutional remedies, and keeping the eye closed with strips of isinglass plaster, will generally suffice. **ART. II.**—*A new Needle for Sutures.* By Dr. PAUL F. EVE.—The needle is mounted on a handle, is slightly curved with a lancet-like point and canula at the curvature through which the ligature is passed; the sides of the wound being transfixed, the ligature is passed through the canulated portion, and held while the needle is withdrawn. **ART. III.**—*Psychology.* By Dr. B. H. WASHINGTON, Hannibal, Mo. **ART. IV.**—*Tobacco vindicated.* By JEROME COCHRAN, Student of Medicine in the University of Nashville. **ART. V.**—*Ligature of the Femoral Artery.* By Dr. E. J. KIRKEY of Radfordville, Ala. **ART. VI.**—*Successful Treatment of Vesico-Vaginal Fistula.* By Dr. W. T. BRIGGS of Nashville.—The fistula was situated at the junction of the vagina with the cervix uteri. The operation consisted in uniting the vaginal with the uterine lip of the fistula, thus throwing the os uteri into the cavity of the bladder. The recovery was complete.

ATLANTA MEDICAL AND SURGICAL JOURNAL.—October.

ART. I.—*Valedictory Address in behalf of the Graduating Class of 1890.* By S. T. BRASLEY, of La Grange, Georgia. **ART. II.**—*An Inaugural Thesis on Hygiene, for the Degree of Doctor of Medicine, in Atlanta Medical College.* By THOMAS H. SANDERS, of Anderson, South Carolina. **ART. III.**—*Medical Clinic for the Session of 1890.* By J. G. WESTMORELAND, M.D. **ART. V.**—*"Ethereal Tincture of*

Valerian in Convulsions of Children."—The author, Dr. H. L. BYRD, of Savannah, alludes to an article in the September No. of this Journal, and claims the credit of introducing this subject to the profession.

NEW ORLEANS MEDICAL NEWS AND HOSPITAL GAZETTE.—Oct.

ART. I.—*A Case of Cryptorchidism, with Remarks.* By ANTHONY PENISTON, M.D. **ART. II.**—*A Statistical Tableau of the Cases in Wards fourteen and fifteen of the Charity Hospital.* By ANTHONY PENISTON, M.D.—The whole number of patients was one hundred and fifty-four—number of deaths, fourteen; two of whom died of consumption, one of hemorrhage of the lungs, one of scarlet fever, two of sunstroke, one worn out by long and inveterate habits of intemperance, and one of delirium tremens, making eight which might be considered beyond medical aid. **ART. III.**—*Quinine in Pneumonia.* By O. C. GIBBS, M.D., of Frewsburg, New York.—This is a reply to an article by Dr. MARSH, of Port Hudson, denouncing the employment of quinine in this disease. Dr. G. relates his experience, and thinks the remedy peculiarly adapted to pneumonia, especially of the adynamic type, he regarding it as a tonic and sedative.

THE SAN FRANCISCO MEDICAL PRESS.—July.

ART. I.—*On the Diseases of Females in California.* By Dr. E. A. RUNKLER of Placerville.—Change of climate, customs of the country, and various other causes render the female emigrants to California peculiarly liable to diseases, some of which the author has noticed, including a case of cancer, retroversion of the womb, complicated metritis and ovaritis, induration and atresia of the womb with complication, and various affections of the stomach and liver. **ART. II.**—*On the Preparations of Pharmacy.* By E. J. CANAVAN. **ART. III.**—*Removal of seven inches of the Shaft of the Tibia—Reproduction of Bone—Fracture—Pseudarthrosis.*—*Operation—Recovery.* By Dr. E. S. COOPER, Professor of Anatomy and Surgery in the medical department of the University of the Pacific. **ART. IV.**—*Permanent or Adult Teeth.* By E. C. ANGELL, Dentist, San Francisco. **ART. V.**—*Instantaneous Cure of Sciatic Neuralgia by Cartierizing the Lobe of the Ear.* By Dr. JOS. HAINES, San Francisco.—The mode of procedure was to apply an ordinary probe, made red-hot, to the posterior part of the lobe of the ear, on the same side where the neuralgia existed. The author reports three cases, for the purpose of calling the attention of the profession to the subject. **ART. VI.**—*Scooping of Bone a Substitute for Excision or Amputation.* By Dr. E. S. COOPER.—A paper read before the San Francisco Medico-Chirurgical Society, recommends the removal of longitudinal sections of the long bones in cases of disease, and keeping the wound fully open, until the surface operated upon becomes covered by healthy granulation, thereby avoiding great inconvenience that might occur from exfoliation, where an attempt is made to heal by first intention. He reports four cases. **ART. VII.**—*Incipient Gangrene treated by free incision.* By Dr. WM. PITT. **ART. VIII.**—*Case of Dermalgia.* By Dr. J. MORISON.

SMOKING.—The pupils of the Polytechnic School in Paris have recently furnished some curious statistics bearing on tobacco. Dividing the pupils of the college into groups, the smokers and the non-smokers, it is shown that the smokers have proved themselves in the various competitive examinations far inferior to the others. Not only in the examinations on entering the school are the smokers in a lower rank, but in the various ordeals they have to pass through in a year, the average rank of the smokers had constantly fallen, and not inconsiderably, when the men who did not smoke enjoyed a cerebral atmosphere of the clearest kind.—*Pharmaceutical Journal.*

American Medical Times.

SATURDAY, NOVEMBER 10, 1860.

PAST AND PRESENT.

THAT we have fallen upon evil times seems to be the settled conviction of some of our medical brethren. We never fail, when we meet them, to be entertained with their repinings at the low state of medicine in these degenerate times, and the consequent prevalence of empiricism. Some of our older physicians, of this class, have been heard uttering pious benedictions upon the early communities in which they practised their profession, and predicting for the rising generation of medical men, lives of unrequited toil, and life-long contentions with the evil genius of medicine. A veteran practitioner was lately bemoaning the unwillingness of his patients to submit to bloodletting, and attributed this fatal prejudice to the influence of the prevalent systems of quackery. Another, in the meridian of life, ambitious of a wide consultation business, with many a vain regret, deplored the strict rule of ethics which debarred him from cropping in the flowery fields of illegitimate practice. A third, encountering in his families the baneful influences of empiricism, was half tempted to become everything to every one, to retain and extend his business. We think, indeed, that many a one is led, at times, to believe that our age is about the most trying upon which he could have fallen. He sighs involuntarily for a return of that period when the good physician was held in equal veneration with the Gods. It flatters his professional pride, galled and chafed by daily contact with the rude and inappreciative age in which he lives, to recall the language of inspired wisdom:—"Honor the physician with the honor due unto him, for the most high hath created him because of necessity. * * * Give place and honor to the physician, for God hath created him; let him not go from thee, for thou hast need of him." How his heart warms towards Herophilus, who called physicians, "The hands of the Gods;" and how he honors the great Homer, who affirmed "That one physician is far more worthy than many other men." He regrets that his lines had not fallen in the pleasant places of the past—among the intelligent Abderians of whom it is said, when Hippocrates came to their city to cure Democritus of his madness, not only the men, but also the women and children, and people of every age, sex, and rank, went forth to meet him, giving him, with a common consent, and loud voice, the title of tutelary deity and father of their country; or among the Athenians who celebrated plays to his honor, and placed upon his head a crown of gold, and finally erected his statue for a perpetual monument of his piety and learning. He will note many other periods in the history of medicine when it would seem far happier to have lived than at the present; when physicians appear to have been held in higher public estimation, and empiricism had far less influence. But the student of history, who penetrates beneath the surface of events, with due discrimination contrasting the spirit of the past with that of the present, finds much to commend the latter to his esteem; and to nerve him to greater effort and

vigilance. He learns that the grossest forms of empiricism prevailed universally among the people of the past, and that Hippocrates, Galen, Paré, and others, had to contend, life-long, against its wide-spread popular influence. He learns, too, that all the great names which adorn the history of medicine derive their chief lustre from lives of probity, self-sacrifice, and devotion to the highest interests of their profession. In vain he searches for evidence that they ever made their profession subservient to the interests of worldly honor or gain; or by evil associations, directly or impliedly, recognised empiricism in any form. To such a student these are the repinings of selfish or shallow men, who pursue their profession from motives the most grovelling and unworthy. The present has its trials, as had the past; but it will require little penetration to discover that the degeneracy of our times does not show itself so much in the prevalence of empiricism or the credulity of the people, as in the ignorance, the cupidity, and the low, selfish aims of regularly educated medical men. "Medicine," says Hippocrates, "is of all the arts the most noble; but owing to the ignorance of those who practise it, and of those who inconsiderately form a judgment of these, it is at present far behind all other arts." A remark more pertinent to our own times could not well have been made. The venerable physician who condemns his patient's aversion to his favorite operation of phlebotomy, has lived to see the patient become wiser than himself. It is not a change in public sentiment that renders the practitioner of to-day less successful in gaining the confidence of his families than formerly, but it is the rust that he has allowed to accumulate upon his knowledge, which the intelligent communities of our time readily discover. We have mentioned cupidity as one of the sins of medical men, which tends to abase medicine. We believe it is the most damning evil of the profession of our times. It is not only the grand obstacle to the constant acquisition of knowledge, which should characterize the true physician, but leads him into evil practices and unprofessional associations, which degrade his profession to a level with that of the merest trade. The wild rush of medical men for business, the arts by which they often obtain it, and the desperation of the less successful, are most humiliating to witness. It is not to be denied, and we make the confession with shame, that there are practitioners among us, holding important medical positions, who give professional advice to irregular practitioners, simply to gain the paltry fees which accrue from such associations. Many weak and timid men are led by these examples to disregard the high obligations of their calling, and, allured by the vaunted popular estimation of the various forms of empiricism, to seek its flattering rewards; they soon become indifferent to their shame and disgrace, and are lost to our profession. Such are some of the causes of the evil times upon which we are thought to have fallen, and of which we hear such frequent complaints. The remedy, like the evil, is in the profession itself. The line between the true and false, the honest and the dishonest, cannot be too strictly drawn, nor too rigidly maintained. Let the profession not only eschew all alliance with empiricism, but reject from its fellowship all who countenance or abet irregular practice. Let it purge itself of these unworthy members, these perpetual croakers, whose instincts lead them to quackery, and who are withheld from its full embrace only by the desire to maintain a

certain degree of respectability. Then will the greatest obstacle to the triumph of legitimate medicine be removed, and we may hail the epoch of the "good time coming."

THE WEEK.

CRIMINAL abortion is one of the gigantic social evils of our times, which lies directly within the province of the physician in his daily duties. He is the first to learn the secret desires of the principal or abettor; and his consent to, or denunciation of, the act, will often change at once, and decisively, the purposes of the criminal. In a larger and more important sense, the profession has the power of diminishing this crime, viz. in that direct influence which it can exert upon the social habits of communities, tending to place this act among the most criminal. As medical journalists, and fully impressed with the belief that the profession is responsible for much of the laxity of public opinion as to the criminality of procured abortion, this subject has often pressed upon our notice, and shall yet receive at our hands due attention. Meantime, as embodying our own sentiments, we introduce a series of resolutions presented at the quarterly meeting of the SCOTT COUNTY MEDICAL SOCIETY, of Iowa, by Dr. E. J. FOUNTAIN. We heartily indorse these resolutions, which, in the terse, concise language of the talented author, state clearly and forcibly the duties of medical men in regard to this great evil. We hope this is but the initiative of a general movement among our medical societies, to create a sentiment, in the profession throughout the country, actively adverse to criminal abortion. We hail it as a good omen that a young and vigorous society of the West, already distinguished for its efforts to maintain the highest standard of professional respectability, has taken a stand so honorable, and now appeals to other societies for their co-operation. We gladly place its resolves upon record, and earnestly hope they may stimulate other societies to like action.

"WHEREAS, The medical profession are everywhere cognizant of the fact that the crime of *criminal abortion* is fearfully prevalent, and increasing in all classes of society; and

"WHEREAS, The progress of civilization and the spread of religion appear not to have had the effect of diminishing this species of iniquity; therefore be it

"Resolved, 1. That the members of this Society will co-operate with the American Medical Association and other organizations of the kind in using every effort to disseminate a knowledge of the criminal nature of practices which are too often regarded as harmless, and frequently resorted to by many who would shudder at the thought of destroying the life of a human being.

"2. Resolved, That the members of this Society unite in sentiment with the opinion of the best and most learned men of the profession in all parts of the world, that the fetus is a living being from the earliest period of gestation, the wilful destruction of which, except when required for the preservation of the life of the mother, is a crime as monstrous as infanticide, and its perpetrators should be regarded as felons by the laws of man, as they must be by every precept of morality.

"3. Resolved, That every member of this Society who may be known to yield to the solicitation of any party for the purposes above indicated, shall forfeit his membership, and be regarded as unworthy of fellowship by all honorable physicians.

"4. Resolved, That it shall be considered the duty of every physician, when application for such purpose is made, not only to decline promptly, but to exert his personal influence to the utmost to prevent its accomplishment, by explaining its criminal character, and removing as far as possible the erroneous opinions which are so generally prevalent regarding the life of the fetus.

"5. Resolved, That we denounce the common practice of newspaper proprietors in publishing advertisements which are calculated to encourage the practice of criminal abortion, as one prolific cause of a vast amount of crime and immorality, for which such newspaper editors and proprietors are thereby in a great degree responsible.

"6. Resolved, That we likewise denounce the practice of many druggists in keeping for sale and dispensing such preparations as are known to be used for the purpose of producing abortion, which practice is no less reprehensible than to furnish poison when knowingly purchased with murderous intent, and by which all druggists are *participes criminis* in the evil work of corrupting good morals, and assisting in the perpetration of a crime which should be held in abhorrence by every member of a civilized and Christian community."

Which, having been read and commented upon, were unanimously adopted.

A CIRCULAR of the National Sanitary Association's Committee on DISPENSARIES has been issued by the Chairman, F. E. MATHER, Esq., President of the Demilt Dispensary in this city. The document suggests many interesting questions in public economy and hygiene, and from this circular it is manifest that the committee clearly comprehend the nature and importance of those questions. As we have not space for the entire circular, we subjoin some of its medical questions, hoping that they may elicit voluntary replies from those of our readers who give particular attention to the subjects to which they relate.

"Is vaccination performed gratuitously upon all, without respect to their means, who desire it, and call at the Dispensary?"

"State the total number vaccinated? How many thereof were vaccinated at the Dispensary?"

"What system, if any, is adopted to secure general vaccination? Is it done gratuitously at the domicils? Is it done by districts or at stated periods? State particulars?"

"What system, if any, is pursued to secure a supply of vaccine virus? Is more received than is used by the Dispensary? If so, what is done with the surplus? Is it sold, or given away, or both? What amount per annum for the last two years, has been realized from such sales? What is the rule as to persons who should receive it gratis?"

"What number of syphilitic cases, including all grades, were examined during the year? How many were women? How many were children?"

"Is the syphilitic disease on the increase among the poor?"

"Please narrate instances, if any, in which the services of the Dispensary have arrested the progress of contagious or infectious diseases? Also state instances of especial improvements in domiciliary or public hygiene, through the agency of the Dispensary physicians or officers?"

"Has there been any systematic effort or plan, on the part of the Dispensary, for the diffusion of advice to the poor, on the subject of health? What is it?"

"What would be the hygienic and economic effects, if all such Institutions were to be once and for ever abolished?"

"How can the system be improved and better adapted to the wants and well-being of the community?"

The pressure of deferred matter in our columns compels us to postpone the suggestions we had prepared respecting this class of medical charities; but while inviting attention to the Dispensary Committee's Circular, we would solicit communications upon the subjects indicated in the questions here quoted.

THE adulteration of liquors, next to the adulteration of foods, is one of the most heinous offences which man can perpetrate upon his fellows. And yet that branch of criminal business is carried on to such an extent in this city that the veriest toper knows well that he seldom drinks a glass

of liquor that contains a drop of the kind he called for. The following extract from the *Druggists' Circular* is an authoritative statement as to the perfection to which the art of adulterating liquors has reached, and affords an instructive lesson to physicians who have occasion to recommend liquors to their patients. We heartily agree with a correspondent that there is great need of depôts where genuine liquors shall be kept for medicinal purposes:—

"It will surprise many druggists who have resorted to the celebrated Catawba brandy of Cincinnati as a purer, though perhaps somewhat less eligible article than that usually imported or sold with foreign marks upon it, to know that this famous domestic brand is only whiskey modified by distillation from the made-up wines, and made paler or darker by a larger or smaller proportion of caramel. To the many who have satisfied themselves with the idea that they at least were safe from imposition through a careful observation of the custom-house vouchers and buying from none but original packages, it will be interesting to learn that these original packages, and the vouchers accompanying them, are used successively for many replenishings with factitious liquors, no purer nor better than they could make for themselves at one-fourth the cost. Many opinionated judges, who with much confidence pronounce upon the genuineness of the distilled juice of the grape, its 'bouquet,' purity, and good quality generally, will be loath to admit that a large proportion of that actually imported, and therefore confidently spoken of as genuine, is manufactured by processes quite as unlike the old-fashioned mode of distillation as those practised by our own defrauding liquor dealers; and that a perfect imitation, of French brandy can be prepared by any one having the requisite delicacy of taste and skill in mixing the ingredients used, and that these ingredients are common articles of commerce, are facts which are beginning to be generally admitted. Though the business of sophistication is regarded by thoughtful persons as one of the most fraudulent and disreputable that could engage attention, it is known to be carried on to an enormous extent, and to have been the basis of large fortunes which have brought to their possessors corresponding social position and influence."

THE *Richmond Co. Gazette*, of Oct. 31, in a stirring Editorial on the *Richmond County Medical Society*, thus comments upon its present position, and truthfully points out the duties of physicians to medical societies. We earnestly commend it to the attention of the medical men of Staten Island:—

"THE RICHMOND COUNTY MEDICAL SOCIETY seems little alive to its own interest, or the benefit which it might confer, both on the profession and the community generally, if its stated meetings were well sustained, and a regular attendance of its members secured. That there is this want of interest, is plainly manifest in the efforts which have been made to keep alive its existence by meetings, etc., failing even to procure a quorum. In no other county in the State is this the case. Why, then, should Richmond County be so far behind in this particular? Both as a means of individual improvement, and as an avenue to public favor and confidence, meetings of the Society are of the highest importance. It is a well known fact, that physicians are estimated very much in the community by the interest which they manifest in their profession, and by their efforts to promote the interchange of pleasant and profitable intercourse with each other. In almost every case, where physicians have risen to eminence and distinction, and have attained a strong hold upon the confidence of the public, we find them active members of Medical Societies, energetic in every association connected with the profession, and exerting their powers for its advancement and improvement. Nor is this all: great advantages might be secured to the Island by the hearty and efficient co-operation of the Medical Society with the citizens in their benevolent workings among the poor and destitute."

Progress of Medical Science.

OPHTHALMOLOGY.

By HENRY D. NOYES, M.D.

Contributions to the Knowledge of Defects of Refraction, &c.
By F. C. DONDERS.

(Continued from page 302.)

Section 6—Alludes to the frequent coincidence of hypermetropia and converging strabismus. Normal eyes when wearing concave glasses will often have converging squint in the attempt to see distinctly. The strabismus is described as periodical, because it chiefly presents itself in the attempt to fix the eye steadily. From being periodical it often becomes permanent. Prof. Donders says that in the last eighteen cases of strabismus convergens which he saw, hypermetropia was proven in sixteen. Its degree was from $\frac{1}{16}$ to $\frac{1}{12}$, never in a high degree.

Why presbyopia does not cause asthenopia, may be dismissed in a few words. The presbyopic eye can no longer read at seven inches distance, but at twelve to sixteen it can without exertion, while for sight at greater distances it is as good as ever. It is only the near point of accommodation which has been pushed away from the eye. A proper convex glass corrects this defect, and for greater distances no glass is needed. In hypermetropia the case is very different. The structure of the eye requires a positive glass to bring rays to a focus upon the retina, no matter at what distance the object may be situated. If the power of accommodation be vigorous, the need of a convex glass may for a time be superseded, but when this power fails, symptoms of asthenopia must arise. At great distances hypermetropic persons may not fatigue their eyes in looking, because not required to discern such objects sharply for a long time. If in a case of presbyopia there be no admixture of hypermetropia, there will be no reason why asthenopic symptoms should occur.

Section 9—Treats of the choice of glasses and their effect. The hints here given relate especially to cases of myopia, and are intended to show how the altered conditions of adjusting power should modify the choice of glasses. Prof. Donders says: In a paper formerly published upon this subject (*Archiv. für Ophthal. B. iv. Abth. 1, s. 313*), I laid down the rule that myopic persons should have such glasses as will enable them to discern distinctly, objects at the greatest distance. But it is often observed that when provided with these glasses, they complain of discomfort in looking at objects at eight inches, twelve inches, or even sixteen inches distance. We need not now be surprised at this discrepancy. We have learned above, that myopic persons do not bring into play such a proportion of their adjusting power, as in normal eyes will correspond to a high degree of convergence of the visual axes. That, on the contrary, although the convergence be extreme, their accommodation will be almost inactive. When now they put on the above-mentioned glasses, they are placed in the same situation as normal eyes; that is, for the distance of eight, twelve, or sixteen inches, they must use $\frac{1}{16}$, $\frac{1}{12}$, $\frac{1}{10}$ of their power of adjustment. But in converging to these distances, they have never been accustomed to this exertion, and it is found that only youthful and robust eyes, having but a moderate degree of myopia, are equal to this effort. With those less fortunate, glasses which completely neutralize the myopia, speedily cause asthenopic symptoms and must be laid aside. They must begin with weaker glasses for near vision. If there be no real enfeeblement of accommodation, they will subsequently be able to use the neutralising glasses. The range of adjustment will undergo a change of position, and in later years, the near point and far point will be found to coincide almost exactly with those of the normal eye. The spectacles will have become an integral part of the dioptric apparatus. Both conver-

gence of the visual axes, and effort of accommodation, will harmonize with them. It is my practice to endeavor to enable patients to wear glasses that will perfectly neutralise their myopia, and my experience has been, that myopia is not increased but rather restrained. There are cases in which the increase of myopia cannot be prevented: as, in old people with feeble adjusting power, in amblyopia which almost always accompanies the highest degrees of myopia, and whenever myopia is so intense as to require for its neutralisation glasses so strong as to materially diminish the size of the retinal image. In such cases the same glasses will not serve for both near and distant vision. I recall a peculiar case in which, when examining the eye with the ophthalmoscope, I could see the central part of the retina in the upright image by aid of concave lens $-\frac{1}{4}$ th; the lateral parts could be seen with $-\frac{1}{2}$ th. Here the myopia was greater for direct vision than for indirect. If it were completely neutralised for direct vision, indirect vision would become hypermetropic. The weaker glasses would therefore be preferred.

By the constant use of concave glasses, the limits over which the eye can adjust itself, as above stated, undergo change. In this transposition of the field of accommodation, the remote point is brought nearer to the eye. The degree of myopia therefore appears to have increased. In reality this is not true. It will be found that the same glasses will suffice for vision at an infinite distance as were before required.

If concave glasses be chosen which are too powerful, the myopia becomes hypermetropia, and the baneful consequences of the latter condition will follow. If the mischief have not lasted too long, it may be corrected by obtaining the proper number, and the injurious over-exertion of accommodation relieved by artificial mydriasis. Normal eyes can be speedily made myopic by the use of concave glasses; but the myopia will not inhere in the anatomical structure of the eye, but in the abnormal working of its adjusting apparatus. This functional derangement will speedily disappear when the cause shall be removed.

The hypermetropic eye is directly opposed to the myopic eye, in the deviation of its range of accommodation from the normal standard. For the myopic eye neutralising glasses at first require too much, of the hypermetropia they demand too little. In the former case the exertion of adjustment is too great, in the latter the effort required is much less than has become habitual to the eyes. When the hypermetropic person first receives glasses, which having been fitted to the eyes under the influence of artificial mydriasis, are known to neutralise the defect, he finds when the paralysed tensor choroidæ recovers its functions, that he cannot see at a distance distinctly; and for near vision a young person prefers much weaker glasses. The reason is evident. These persons have become too much accustomed to use their whole stock of adjusting power at distances of ten or twelve inches, to be able to restrain themselves to employ only $\frac{1}{4}$ th or $\frac{1}{2}$ th, which is all that now is required. They constantly overshoot the mark, and have not learned to shorten their range. For this purpose weaker glasses must at first be furnished them, both for near vision and for distant vision. It cannot be doubted, however, that it is exceedingly desirable, for the hypermetropic eye to become gradually habituated to the use of perfectly neutralising glasses. Only when they shall have reached this point, will they be secure against the danger of asthenopia.

The opinion has been that in asthenopia the use of glasses might at length be abandoned, by gradually diminishing their power. But it will be seen from the above, that my effort is in direct opposition to this endeavor. I seek to enable these patients to use glasses increasing in strength, until they attain those which will permit them to look at distant objects without putting forth any effort.

As a concluding remark, it may be added, that Prof. Donders, in advocating for asthenopic persons the use of proper glasses, does not design to omit the repose from excessive

exertion of sight, nor the invigorating medicine and regimen which have so long been the practice of judicious practitioners in these cases. It is seen, however, that the use of glasses strikes at the root and essence of the disease, and is the only certain safeguard against its recurrence.

Reports of Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Wednesday Evening, Oct. 10.

DR. ISAAC REMINGTON, President.

Subject for discussion—Opium as a Therapeutic Agent.

Dr. G. HAMILTON opened the subject by reading a paper, from which we give the following abstracts.

This remedy has been known since the time of Hippocrates, and with exceptional periods, has maintained the character of the most valuable medicine known. The most generally received opinion at the present time is, that it is stimulant primarily, especially to the brain, and sedative secondarily. It is most probable that the latter is the result of the former, as the depression is in direct correspondence with the amount of previous stimulation. When given in excessive doses its effect is directly narcotic, or the stimulation is too short to be noticed. The cerebrum is that portion of the nervous system more particularly acted on by this remedy. When a moderate dose is taken, in about forty minutes there is experienced a slight fullness of the head, or throbbing of the temples; a glow of the cutaneous surface, terminating generally in perspiration; exaltation of the intellectual, moral, and imaginative sentiments; serenity of mind, or the reverse; visual perceptions of objects of a strange or frightful character; sooner or later, oblivionness, and finally, sleep. In larger doses there may be tension of the head, dizziness, redness and suffusion of the eyes, illusions of sight and hearing, delirium. When increased, we have rigidity and tension of the muscles, or trembling and convulsive movements, insensibility, contraction of the iris, coldness of surface, congestion, so perfect as nearly to simulate the apoplectic state. Other organs, besides the brain, suffer; the digestive apparatus partakes, and while appetite is diminished, thirst is generally increased. This loss of appetite may be attributed to a decrease in nutrition and a consequent depression of the nerve powers. The secretions are generally diminished. Perspiration is nearly always increased, and this is accompanied by an increase in the action of the heart and arteries, as shown by the increased color of the surface of the body. An inverse ratio obtains between the action of the kidneys and the skin. The action of opium is more promptly shown, when morphine is applied to a denuded surface, or when subcutaneously injected. According to some authors, it acts more powerfully when injected into the bowels than when taken into the stomach, which they explain by the fact that it is less exposed to alteration by the juices, etc. Our own belief is that its power is diminished when thus employed. Various circumstances modify the action of opium. The young are more susceptible. After children, females are more readily affected by it, and many of them cannot support its operation, even in minute doses. This intolerance will, however, often give way, by combining correctives with it, and persevering in its use. Excessive pain, and certain affections of the nerves, modify to an extraordinary degree, or even wholly resist the action of opium, as in tetanus. Concerning the particular mode of its operation, but little is known; while it acts with a diminished effect, by direct contact with the nerves, its power is increased by absorption into the blood, as seen in children, who are narcotized by sucking from the mother while under its influence. It is particularly incumbent on the physician to attend closely to the various contraindications for its employment, and especially in the cases of

children. As a rule, opium is not to be given in fever, or inflammation with great arterial excitement and strong determination to the brain, nor when there is great venous congestion, nor when there exists an apoplectic tendency. In cough, with much bronchial secretion and debility, etc., its use should be avoided. Much depends upon the judgment of the practitioner. It is especially useful in affections called nervous, allaying agitation, removing *malaise*, subduing pain, and procuring sleep. In pain of all kinds, it is admirable, and without a rival.

Of special diseases, in which this agent is particularly useful, mention might be made of *neuralgia*—especially here is opium to be employed by injection into the cellular tissue over the seat of the pain; *delirium tremens*, the chief difference being as to the dose and frequency of repetition. Some give it till sleep is obtained, while others hesitate, after the use of large doses, and still others are content with small doses carefully watched. Where enormous doses have been tolerated, it is doubtful whether the recovery was the result of the treatment, or in spite of it from a powerful constitution. At all events, it is hazardous practice. A moderate employment of opium with other agents as the case may demand, will probably be more satisfactory. Sleep has often followed its sudden suspension in such cases. In spasmodic affections, external or internal, depending upon excessive pain, opium affords the quickest and surest relief. But, where the cause is not evident, care is requisite to determine if it be of peripheral or centric origin, as in the former only can benefit be expected. Thus convulsions in children, when from teething, the intestines, or indigestion, after a proper evacuation of the stomach and bowels, an injection of laudanum and starch has often proved of greater service than bleeding, or the various topical applications. In the *modus operandi* of opium here, may be seen an exemplification of its powerful sedative powers. Nor is it confined to any one of the three great nervous divisions of the nervous system, for in these affections, sometimes the brain, sometimes the spinal marrow, and at others, the nerves and centres of organic life are most implicated. Now, whilst it would be difficult to define the precise extent to which any one of these systems might be involved, as compared with another, and still more difficult, or impossible to appreciate the correlative movements of these different systems, in a given case of disease, it may perhaps be doubted, whether in pathological states, we are not too much in the habit of attaching too much importance to the brain, and too little to the centres and nerves of organic life. The affections to which reference has been made, are chiefly of eccentric origin, and it is with this peripheral system, that the sympathetic nerves and ganglia have their closest connexion; and the inference is rational, that the sedative power of opium is expected quite as much in allaying morbid irritability of this system, as in merely blunting the perception of this morbid condition of the brain. In idiopathic fevers, this remedy has been much employed in fulfilling various indications, and under different and even opposite states. Thus, it prevents the chill of intermittent, by allaying or rather forestalling peripheral irritation. In typhus and typhoid it is of service in peculiar states. Thus, in the third or fourth weeks, the patient is left much debilitated, with a tendency to still further depression; the skin is dry, the brain confused, sleep is absent, food is loathed, and opium comes in with its best influences. Sleep is produced, and a vast improvement is at once observed. The beneficial effects of the medicine are perhaps derived from both its stimulant and sedative qualities. Small-pox also requires its aid. When the pustules approach maturation, the irritation is greatly increased, and the patient is, at the same time, troubled with a tenacious phlegm, then opium exerts a most salutary effect, producing quietude and sleep. Rheumatism, even with acute fever, or in a robust patient, after venesection, is more amenable to opium than to most other remedies. In puerperal peritonitis it displays admirable powers, curative as well as anodyne. The inflammation assumes a peculiar type, the patient is de-

bilitated comparatively, there is a tendency to gangrene, or a near approach to this condition may supervene, and too much care cannot be observed lest further prostration be produced, *opium becomes the sheet anchor*, as Dover's powder given freely and early in the attack, to prevent further development. The action of the opium, may in a few cases where the patient is very plethoric, be assisted by the lancet, but as a rule, this should be avoided. In dysentery too, this article surpasses all other remedies. In the extensive experience of Dr. H., no necessity has ever existed for a distinction in the use of opium between mild or severe attacks. After removing the fecal contents of the bowels, the force of febrile action and the excessive pain and irritation should be abated. Bleeding either generally or locally, may often beneficially precede opium, yet, as a general rule, it needs not repetition. In certain cases, its guarded use must be kept up, especially in the marked epidemic form of the disease. The solution of this disease is generally by perspiration, and the return of the various functions to their normal state, apparently the sequence of subdued pain and nervous irritation, and these are often removed more quickly and effectually by repeated injections of starch and laudanum than by the use of the article by the stomach. In simple diarrhoea it is the readiest and surest remedy. The same may be said of cholera morbus and Asiatic cholera, except in the congested form of the latter. In the different inflammatory affections of the respiratory apparatus, opium is exceedingly useful. Some writers consider it especially applicable to such affection of the mucous membrane of the air passages and of the parenchymatous structure of the lungs, but this restriction can hardly be thought well founded, as the serous membranes of the chest when inflamed, are, in common with the adjacent tissues, amenable to the same action exercised by opium upon inflamed tissues in general. Perhaps the apparent difference may arise from difference of function in the parts. The quieting of cough, so much more common when the mucous surfaces are affected, and the production of expectoration when opium is combined with antimony or ipecacuanha, may perhaps be more properly regarded as adventitious benefits in the action of the remedy. It seems to equalize or harmonize the distribution of nerve power, removing irritation, and restoring the lost balance of the circulation. Few diseases are more benefited by opium than those peculiar to females. In threatened abortion, it is most effectual. In hemorrhage, it is most reliable; narcotism, however, is to be carefully avoided. In unavoidable abortion, it relieves pain and facilitates the expulsion of the ovum. In labor, too, its value is marked, as where pain is misplaced, and complicates the parturient process. The employment of opium has been objected to as dangerous for ordinary use, but this may with equal reason apply to the majority of articles in the *Materia Medica*, and it is doubtful if any one can offer a tithe of the advantages possessed by this drug. Its action is frank and undisguised, and the moment it seems to exceed our desires, it may be suspended, and the unpleasant symptoms generally disappear. One of the most singular effects of opium is its apparent contrariety of action, as may be seen, when it is given in *anæmia* unattended with fever. Here it often removes a disposition to sleep, acting as a stimulus to the brain, by inducing a greater degree of arterial action. In the same *anæmic* state, with irritation and fever, it will often produce sleep, acting here, by allaying nervous irritation from its sedative power, and inducing sleep by its anodyne and soporific qualities. Instances of this sort are seen in the latter stages of typhoid and typhus fever, typhoid pneumonia, and many other analogous conditions, and strangely enough in the reactionary fever noticed after excessive hemorrhage, as in some cases of abortion. In moderate doses, it invigorates the action of the heart in *anæmia* without fever, probably by direct action, and likewise in cases where the heart's action is nearly suppressed, as in excruciating pain from any cause. In conclusion, he would say that want of time prevented the presentation of a paper

more in accordance with the importance of the subject under discussion.

NEW YORK ACADEMY OF MEDICINE.

DR. JOHN WATSON, PRESIDENT.

At a meeting of the Academy of Medicine held Sept. 19, the section on *Materia Medica* brought to the notice of the Academy the following paper upon the alkaloid of the *Erythroxyton Coca*, in the *London Chemical News* for July 28, 1860.

A NEW ALKALOID IN COCA.

Coca (pronounced ko-káh) is the name under which the leaves of several species of *Erythroxyton* are and have been known in Peru from time immemorial, and which, especially among the Indians, are used for chewing, mixed with a little unslaked lime or wood ashes. Numerous and somewhat fabulous accounts are given of their physiological action, as for instance in *Tschudi's Travels in Peru*. A moderate use is said to produce excitement of the functions, to enable the chewer to remain some time without food, and to bear the greatest bodily exertions; while an immoderate chewing of coca, like that of opium, frequently becomes an habitual vice producing all the deleterious symptoms and consequences of narcotics, such as a state half of intoxication, half of drowsiness, with visionary dreams, premature decay, complete apathy, and idiocy. These peculiar symptoms rendered the presence of a narcotic principle very probable, and have induced Prof. Wöhler and Dr. Niemann, of Goettingen, to undertake the investigation of the substance. The material was furnished by Dr. Scherzer, the naturalist of the exploring expedition in the Austrian frigate *Novara*. The examination has so far succeeded, by the usual method for the separation of alkaloids, in eliminating a crystallizable base, *cocaine*, crystallizing in small prisms, devoid of color or odor, slightly soluble in water, more readily in alcohol, and very easily in ether. It possesses a strongly marked alkaline reaction, and a bitter taste, and acts in so far peculiarly, as it transiently benumbs, or almost paralyzes the part of the tongue which it touches. It bears some resemblance to atropine in its chemical relations, and forms perfect salts with the acids. It is, however, without action on the eye, and its compound with the chloride of gold is remarkable for forming benzoic acid in large proportion upon being heated. Further experiments will throw light on its physiological properties.

This article is taken from *Archiv de Pharm.* Bd. cii. a. 29, and in it Niemann, the assistant of Wöhler, claims to have been the first to discover and describe the alkaloid of the *Erythroxyton Coca*. The section referred the Academy to a paper read upon this plant and its uses, by Dr. S. R. Percy, at a meeting of the Academy, Nov. 4, 1857, and also to a description and exhibition of a quantity of the alkaloid, presented at the meeting, Dec. 2, 1857. The alkaloid exhibited by Dr. S. R. Percy at that time, was in fine colorless crystals, and a description was given of its properties, and it was named by Dr. Percy, *Erythroxyline*. The original paper as read by Dr. Percy was produced from the Library, and from it the following extract was made:—"December 2d, 1857. Exhibited to the Academy of Medicine Σ i of the alkaloid of the above plant (*Erythroxyton coca*) in fine colorless crystals, for which I propose the name *Erythroxyline*. Cocaine might be more correct, but may be confounded with other substances." The above statement is made only to prove that while other nations have been industrious we have not been idle.

DR. BLAKE, of Sacramento, Cal., speaking of the advantages of the climate of California to consumptives, attributes much to the out-door life which it enables this class to lead, without exposure, and mentions the fact that Indian children domesticated, die in large numbers of phthisis.

Correspondence.

UNIVERSITY OF MICHIGAN.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—My attention has just been called to your excellent Journal of the 13th instant, in which is given an account, among those of other institutions, of the *College of Medicine and Surgery of the University of Michigan*.

As some errors have crept into that account, of course inadvertently, a correction seems required. Without repeating the statement which was made, leaving out as it did, a Professor, an Assistant Professor, and the Demonstrator of Anatomy, besides presenting the duties of most of the faculty quite different from what they are at present (though the latter is entirely excusable, as changes have recently occurred), I will give a correct list of the members of the faculty and their respective positions as at present arranged.

Z. PITCHER, M.D., Emeritus Professor of Obstetrics and Institutes of Medicine.

A. SAGER, M.D., Obstetrics and Diseases of Women and Children.

S. H. DOUGLASS, M.D., Chemistry, Pharmacy, and Toxicology.

M. GUNN, M.D., Surgery.

A. B. PALMER, M.D., Pathology, Practice of Medicine and *Materia Medica*.

C. L. FORD, M.D., Anatomy and Physiology.

A. DuBOIS, A.M., Assistant Professor of Chemistry and Pharmacy.

WM. LEWIS, M.D., Demonstrator of Anatomy.

In addition to the four lectures a day, there are two Surgical and two Medical Clinics each week. In consequence of the recent death of the former able occupant of the Chair of Pathology and Practice, which event has been announced in the journals, the former Professor of *Materia Medica*, Therapeutics, and Diseases of Women and Children, was transferred to the vacancy, and to meet the exigency, continues for the present term to give instruction also in *Materia Medica* and Therapeutics.

To accommodate this state of things, other changes were also made in the arrangement of duties of other Professors. Allow me to add that the lectures are now in progress with an enthusiastic class of about two hundred and twenty in number, gathered from a considerable proportion of the States of the Union.

Very truly yours, &c.,

A. B. PALMER, M.D.,
Dean of Faculty.

ANN ARBOR, October 25, 1886.

EXORBITANT CHARGES OF APOTHECARIES.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I am constrained to call the attention of my brethren of the profession to the, in very many instances, exorbitant charges of druggists for compounding our prescriptions, and to some of the consequences thereof prejudicial to our interests. These charges many times have no relation to the actual value or cost of the ingredients and labor of making them up; and this fact is often as manifest to our patients as to ourselves. The plea that they are necessary, on account of the large number of stores in competition, to enable them to live and sustain a popular and attractive style, has no importance in the premises—especially in the opinion of those customers whose means are limited and family expenses heavy. And I believe the idea is more or less prevalent among the people, that some of us connive at these high prices, and share the profits with the apothecary.

How far this imputation is merited I do not know; but if it applies to *any*, they certainly should be exposed and shunned.

None of us can doubt, upon a little reflection, that one of the tendencies of this grievance is to drive many families to the employment of homeopathic practitioners, who, it is known, do not occasion their patients the additional expense of prescriptions—not even when they hypocritically slip in the old school medicines and doses. Another consequence is, doubtless, the inducement to treat themselves as long as possible before calling in medical aid, and also to resort to patent medicines, etc.

I trust the profession will not continue to be indifferent to this matter, for we cannot deny that we owe an obligation to our patients in regard to it. If no other alternative be afforded us, I conceive we must, in some measure, imitate our competitors, and carry what medicines we well can in our pockets. I find, indeed, that this is already the custom with two or three of our oldest practitioners.

PHYSICIAN.

BROOKLYN, Oct. 23, 1880.

PAY OF SURGEONS IN THE NAVY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In the number of the *Medical Times* for Oct. 20, you have fallen into an error as to the pay of the medical corps of the navy.

During the last session of Congress a law was passed regulating and increasing the pay of the officers of the navy, By that law the pay of medical officers is as follows:

Every surgeon on duty at sea, for the first five years after date of commission, \$2,200; for second five years, \$2,400; for third five years, \$2,600; for the fourth five years, \$2,800; for twenty years and upwards, \$3,000.

Fleet surgeons, \$2,300.

Every surgeon on other duty, for the first five years after date of commission, \$2,000; for the second five years after date of commission, \$2,200; for the third five years, \$2,400; for the fourth five years, \$2,600; for twenty years and upwards, \$2,800.

Every surgeon on leave or waiting orders, for the first five years after date of commission, \$1,600; for the second five years after date of commission, \$1,800; for the third five years, \$1,900; for the fourth, \$2,100; for twenty years and upwards, \$2,300.

Every passed assistant surgeon on duty at sea, \$1,500; when on other duty, \$1,400; when on leave or waiting orders, \$1,100. Every assistant surgeon on duty at sea, \$1,250; when on other duty, \$1,050; when on board or waiting orders, \$800.

Excuse the liberty I take in making this correction, and believe me to be, with great respect,

Your obedient servant,

JOHN THORNBY, M.D., Surgeon, U. S. N.

MORRISTOWN, N. J. Oct. 23.

DOMESTIC CORRESPONDENCE.

VERMONT.

October 26.

THE annual meeting of our State Medical Society has just closed. The session was held at Montpelier, beginning on Tuesday the 16th of October. The President, Dr. E. A. Knight, of Springfield, was in the chair; and Dr. McCollom, of Woodstock, was appointed Secretary. Through the Committee on Subjects for Discussion the following important subjects were submitted for consideration: 1. *Puerperal Convulsions*; 2. *Diphtheria*; 3. *Relation of Diseases of the Sexual Organs in Females to Insanity*; 4. *The external use of Anæsthetic Agents in Spasmodic and other Painful Affections*. These subjects elicited most interesting and profitable discussions, in which the members from different sections of

the State had an opportunity of comparing their views. Among those who participated in these discussions were PROF. PERKINS, PROF. SANBORN, DRs. KNIGHT, ALLEN, SMITH, ROSS, BULLARD, GREEN, FIELD, and McNAB. The consideration of practical subjects forms the most interesting feature of our annual meetings, and amply repays those who attend them. In addition to these discussions, interesting verbal communications were made by several members. PROF. SANBORN, one of the most talented surgeons of New England, exhibited a patient upon whom he had successfully operated for ununited fracture, by the silver wire, and explained the method. DR. CHANDLER, of St. Albans, read an essay upon medical ethics, which was well received, and a copy solicited for the archives of the society. DR. CLARK laid before the society the spleen of a boy fifteen years old, which weighed seven and a half pounds. PROF. SANBORN offered the following resolution, which was adopted:—

Resolved, That the delegates of the Medical Colleges be instructed by the State Society to be present at the examination of the candidates for the Medical Degree, and examine specifically as to the fulfillment in each case of the requirements of the American Medical Association, and report annually to the Society.

This resolution by one of the leading men in our schools, acknowledges that the influence of the National Medical Association is annually more and more felt. You cannot too strongly urge the Association to take decided grounds on the question of a high standard of medical education, and I hope to live to see the day that its voice will be all-powerful in this matter. The annual address of the President, DR. E. A. KNIGHT, was received, as it richly deserved, with general favor. The following members were elected to membership: DR. C. M. BRIGHAM, Pittsfield; DR. S. BELKNAP, Barnard; DR. J. MORGAN, Swanton; DR. B. W. CARPENTER, Burlington. The next semi-annual meeting will be held at Rutland. The following officers for the next year were elected: *President*, DR. B. F. MORGAN, of Bennington Centre; *Vice President*, DR. W. PUTNAM, of Greensboro'; *Recording Secretary*, DR. W. MCCOLLOM, of Woodstock; *Corresponding Secretary*, DR. C. B. CHANDLER, of Montpelier; *Librarian and Treasurer*, DR. C. CLARK, of Montpelier. The following gentlemen were appointed delegates to the National Medical Association: PROF. J. PERKINS, Castleton; DR. B. F. MORGAN, Bennington; PROF. C. L. ALLEN, Castleton; E. K. SANBORN, Rutland; DR. J. N. STILES, Windsor; DR. E. A. KNIGHT, Springfield; DR. WM. M. HUNTINGTON, Rochester; PROF. P. D. BRADFORD, Northfield; DR. W. L. WILLIAMS, Hartford; DR. C. M. CHANDLER, Montpelier; DR. C. M. RUEBE, Montpelier.

During the session, DR. CLARK brought forward the subscription for erecting a monument to Hunter, and a committee of one from each county was appointed to assist him in obtaining subscriptions. This was one of the most interesting sessions of our society which I have attended for many years. Let me add, finally, that although I have myself but recently become a subscriber to the *MEDICAL TIMES*, yet on reviewing its back numbers, and marking its liberal tone, the vast stores of practical matter which fill its ample pages, and its moderate subscription price, I earnestly hope that it may have a wide circulation in the profession of this state.

Vt.

FOREIGN CORRESPONDENCE.

Letter from DAVID P. SMITH, M.D.

EDINBURGH.

Oct. 1, 1880.

PROF. SYME explained and described the symptoms which led him to employ the actual cautery in joint diseases. They were—1st, Severe pain, stretching from the affected joint to the one below. 2d, Loss of motion. 3d, A prickly sensation, as if the limb was asleep. In his opinion these symptoms indicated commencing ulceration of the cartilages, and were combated by nothing so effectually as by the thorough application of the hot iron. He mentioned using a heated poker for a case seen out in the country

when there was no cautery iron to be had. The hospital patient expressed himself as entirely relieved from pain by the first application of it. In case of the shoulder it should be applied before and behind the joint; in case of the elbow, over each condyle, etc. He also took occasion to remark that he thought that the great facility of tying the femoral artery for aneurism had led surgeons to too hastily adopt the same treatment in case of other arteries. He considered that axillary aneurism should always be treated by evacuating the sac and tying both ends of the artery.

Oct. 2. Mr. Syme showed a patient on whom he had operated for radical cure of hernia by invaginating a portion of the scrotum in the manner now so universally practised. He remarked that, without wishing to detract from the ingenuity of various individuals, all the apparatus used for the purpose was unnecessarily complicated: a piece of candle with a little piece of twine through one end would answer all purposes. He did not think there was any danger that the seton-like thread would excite so much irritation as to make it proper to use metal instead. A fibrous tumor of the breast was removed, and a boy's thigh amputated for disease of the knee-joint. It was remarked, in speaking of the removal of wens in the scalp, in the negro race, that they adhered to the surrounding parts with far greater tenacity than ordinary, and that this peculiarity of greater density pertained to all the tissues of the negro—Mr. Syme claiming that he could tell from the observance of this fact whether any piece of tissue did or did not belong to the negro.

Oct. 3. Mr. Spence to-day excised a carious elbow-joint. It is a far easier proceeding than would naturally be expected. After making the usual H incisions, the ulnar nerve was easily enough held out of the way, and then the clipping off of the olecranon allowed the bones to be easily got at and sawn off. After their removal I found the end of the humerus and ulna exhibiting a most beautiful specimen of caries. For just such disease, and for crushing of the joint, this operation must be invaluable.

Oct. 4. I, to-day, went through the wards with Prof. Bennett, and saw many interesting medical cases. Partial and complete paralysis of the extremities seems to be a very common disease here, arising no doubt from the insufficient nourishment of the lower classes. In the hospitals of these crowded capitals of the old world one sees very clearly that penury and want are the great producers of disease. What a vast and noble work it would be to endeavor to ameliorate the sufferings of the poor. Physicians see daily their hardships, and it is and must be their duty to arouse the upper classes to a knowledge of their condition, and lead to measures for their relief. The rest, comfort, and good diet found in a hospital are powerful agents for the cure of almost all diseases. Dr. Bennett seems fully aware of this, and pays great attention to the diet afforded his patients.

Oct. 13. A very severe case of erysipelas of the head and face has just recovered completely with the use of nourishing food and stimulants. While Dr. Bennett was showing this case and remarking that under this treatment—beef tea and wine—all got well, except in the case of drunkards, a gentleman from Calcutta said he had there seen ten cases of idiopathic erysipelas which were treated antiphlogistically. Of these nine died. They became delirious soon after the commencement of the disease, were bled largely, and soon died. Dr. Bennett did not think the occurrence of delirium was any warrant for bleeding. He had not observed any particular benefit to arise from the use of the tr. ferri sesquichloridi. A severe case of double pneumonia has done very well during the last week under supporting treatment—wine, beef-tea, beef-steak. At the end of the seventh day from the occurrence of the rigor copious lithates appeared in the urine, and great improvement immediately followed. A case of acute articular rheumatism was treated by drachm doses of bicarb-potass. thrice daily in a good deal of water. The disease came to a stand on the seventh day. A case of paralysis of the upper

extremity, of six years' standing in one, and four years' standing in the other arm, has been under the treatment of a gentleman who professes to cure paralysis, when not dependent on manifest structural lesion, by systematic exercise of the muscles of the affected limbs. There has as yet been no improvement. A case of hæmoptysis served as a text upon which Prof. Bennett made remarks showing that he had no confidence in the administration of gallic or tannic acid as styptics, except in hemorrhage from the gastrointestinal mucous membrane. If gallic acid is beneficial in hæmoptysis, he asked why should it not be in apoplexy, and, consequently, what reason is there for using it in the one disease and not in the other? In the case under consideration he relied upon perfect rest, nourishing diet, cupping, and the application of nitrate of silver to the larynx to quiet a teasing cough.

Medical News.

ERRATA.—In Dr. Agnew's article, in the last number, on page 308, 11th and 15th lines from bottom, for conical, read *corneal*; make the same correction, page 309, 3d line from the top; page 308, 6th line from bottom, for upper, read *lower*; page 309, 1st line from top, for form, read *fossa*.

CÆSAREAN SECTION.—On Saturday, Nov. 3, this operation was performed for contracted pelvis, at Bellevue Hospital, by Dr. B. F. BARKER. The mother continued to do well until the fifth day, when vomiting occurred, and death soon after followed. The child weighed nine pounds.

It is stated that, at the Veterinary School, at Alfort, operative surgery is taught upon the body of the living horse.

SURGEONS FOR RAILROADS.—Many of the Continental Railways are divided into medical sections, to each of which is appointed a qualified surgeon, whose duty it is to treat all who meet with accidents, and to attend the employes upon the road. He receives a regular salary.

THE APOTHECARIES of Boston have determined to close their stores on Sundays from 1 to 6 P.M.

THE Committee on Health, of the Common Council of Jersey City, are about to erect a new hospital, at the foot Washington street, adjoining the Almshouse. The cost attending the construction of the hospital will not exceed \$1,300, to be paid out of the city treasury.

A PHILADELPHIA DOCTOR has been detected sending counterfeit bills to druggists with his prescriptions, the patient being an accomplice.

In Dickens's "Tale of Two Cities," the hero, Charles Durnay, is stupefied with ether or chloroform, in 1793, more than fifty years before they had been made known.

SAN FRANCISCO.—The number of physicians in this city, according to the recently published Directory, is 189; increase in one year, 20; number left business in the last twelve months, 55; number still in business, 114.

MILK TRADE IN NEW YORK.—This city receives by railroad, independently of the supply from swill-fed manufacture, 180,000 quarts of milk daily; this is paid for at the rate of seven cents per quart, making the yearly aggregate of about \$5,000,000. The Harlem Railroad is said to derive an annual revenue from this source of \$250,000.

DIGITALIS IN DELIRIUM TREMENS.—Mr. Jones of Jersey (Eng.) reports great success in the treatment of delirium tremens by large doses of the tincture of digitalis. He gives from half ounce to ounce doses, and repeats them frequently; the effect being to quiet the nervous excitement and lower the pulse.

BIOGRAPHY OF DR. DRAKE.—Prof. W. H. N. Magruder, of Baton Rouge, La., is said to be engaged on a biography of the late Dr. Drake. He solicits information from those

who have letters or papers which may be of value in such an undertaking.

A REVIEWER in the *Boston Med. and Surg. Journal* says: "We repeat, knowingly, and in spite of all that has been said, the first authenticated case of death from sulphuric ether has yet to be made known." The writer of this paragraph, who claims to speak "knowingly," cannot do the profession a greater service than by publishing the facts upon which he rests his assertion.

MEASLES NOT A NECESSARY DISEASE.—Dr. Lankester, one of the English Medical Officers of Health, believes that measles is one of the preventible diseases. He says:—"It is undoubtedly preventible by the same precautions as the other forms of contagious disease, but so ineradicably fixed in the minds of all parents is the notion that children must have the measles, and that it is a mild and harmless disease, that nothing which can be said or done for its prevention will carry any weight with them."

STATISTICS OF IMBECILITY.—It is estimated that in England and Wales there are 12,000 persons of all ages belonging to the class of imbeciles; of these, 2,500 are regarded as suitable subjects for school training, but provision exists for only 600. In Scotland there are about 3,000 imbeciles, 600 of whom are capable of improvement; provision exists for only 36. In Ireland, there were, in 1867, 4906 imbeciles, with no educational provision.

The British Association for the Promotion of Social Science, recently met at Glasgow, Lord Brougham presiding. In his inaugural the President called attention to the Sanitary Department, which by its inquiries had caused legislation upon quarantine, the passage of a bill for repressing the adulteration of food, improvements in the public records of sickness and mortality, the appointment of an Indian Army Sanitary Commission, and concluded by urging upon its attention the recent fatal railway accidents. "It is remarkable," he adds, "that the evil is confined to Great Britain. In France, the greater discipline and more careful administration, even more than the less speed, and the want of excursion trains, is probably the reason that grave accidents there are all but unknown." A large number of interesting papers on Sanitary matters were read by the leading Sanitarians of England.

TO CORRESPONDENTS.

Criminal Abortion.—"This is a subject of such vast importance that it very properly is occupying very much of the attention of the members of our profession—yet not half as much as it deserves, and in many parts of our country it receives apparently no notice whatever. It is not sufficient to condemn this crime among ourselves, and make no effort to reach those who are its frequent subjects. I think the public mind can be enlightened on this subject, and the evil very greatly abated if every medical society in the country would take a stand, and resolve to work in a practical way against it."

DAVENPORT, IOWA, Oct. 31.

E. J. F.

Monument to Jenner.—"In your 'Address to Medical Students' in the No. for Oct. 13, it is thus written, 'No monument to the immortal Jenner casts its shadow with that of the hero of battles in Trafalgar Square,' &c., &c. Now, Sir, I can bear my testimony to the fact that such a monument does exist, and is, at this moment, casting its shadow (i. e. when the sun shines) at the base of the Nelson column. The lesser statue is, however, overshadowed by the greater. Jenner, being represented in a sitting posture, on a plinth of small elevation, while Nelson, from his lofty column, looks down, with contempt, upon 'all below.' Whether the humble should not rather have been exalted, and the warrior have occupied the lower place, it becomes not me to decide. I rejoice that England is, at last, waking up to a sense of her duty to the memory of those illustrious men who have adorned our profession, as is testified by the statues of Babington and Cooper in St. Paul's Cathedral, and that of John Hunter, about to be erected in Westminster Abbey, in *eternam memoriam*."

BRIDGEPORT, Oct. 27.

J. G. A.

R.—We cannot publish the names referred to, however authentic the record may be.

F.A.M.—You had better study Brodie's work on the Diseases of the Joints.

COMMUNICATIONS have been received from:—

Dr. H. D. BULKLEY, N. Y.; Dr. O. C. GIBBS, N. Y.; Dr. J. G. ADAMS, Ct.; Dr. E. J. FOUNTAIN, IOWA; Dr. J. E. TAYLOR, N. Y.; Prof. JOSEPH HENRY, Washington; S. M. BAIRD, Esq., New Mexico; Dr. D. P. SMITH, Edinburgh; Dr. C. W. BOYCE, N. Y.; Dr. N. W. BUEL, N. Y.; Dr. C. HIXON, Ill.; Dr. A. H. GARNETT, Va.; Dr. C. D. BUDD, N. Y.; Dr. D. LITTLE, N. Y.; Dr. P. COMBES, Mich.; Dr. D. HOLMES, Pa.; Dr. C. GREEN, N. Y.; Prof. G. C. BLACKMAN, O.; Dr. J. BOLTON, Va.

METEOROLOGY AND NEOUROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 27th day of October to the 3d day of November, 1860.

Deaths.—Men, 102; women, 88; boys, 101; girls, 110—total, 386. Adults, 135; children, 211; males, 203; females, 193; colored, 6. Infants under two years of age, 189. Among the causes of death we notice:—cholera-infantum, 5; infantile convulsions, 27; croup, 11; diphtheria, 10; diarrhoea, 6; dysentery, 1; scarlet fever, 33; typhus and typhoid fevers, 10; pertussis, 3; consumption, 57; small-pox, 8; dropsy of head, 13; infantile-mariasmus, 25; inflammation of the brain, 11; of bowels, 8; of lungs, 15.

Oct. and Nov.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	°	°	°	°	°			
28th.	30.23	.10	58	49	60	6	10	E.	0 to 10	1 in.
29th.	30.18	.10	60	56	65	4	6	SE.	10	
30th.	30.14	.05	61	56	67	2.5	8	SE.	10	.15
31st.	30.12	.08	67	63	73	5	8	SE.	9.9	
1st.	30.14	.04	65	62	71	6	10	SE.	4	
2d.	30.18	.06	68	64	73	5	10	SE.	7	
3d.	29.70	.64	61	57	65	2.5	4	SE.	8	2.9

REMARKS.—28th and 29th, wind fresh, A.M. light, P.M.; 30th and 31st, light winds, with fog on the morning of the 31st. Nov. 1st, fog A.M. fine P.M., with light winds; 2d, wind light, A.M., fresh, P.M.; 3d, wind fresh, A.M., tempest, P.M.

MEDICAL DIARY OF THE WEEK.

Monday, Nov. 12.	{ NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Macready, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Nov. 13.	{ NEW YORK HOSPITAL, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, half-past 1 P.M.
Wednesday, Nov. 14.	{ EYE INFIRMARY, Operations, 12 M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Gouley, half-past 1 P.M. N. Y. PATHOLOGICAL SOCIETY, half-past 7 P.M.
Thursday, Nov. 15.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M.
Friday, Nov. 16.	{ NEW YORK HOSPITAL, Dr. Parker, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, 1 1/2 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Nov. 17.	{ BELLEVUE HOSP., Drs. Parker and Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. EMIGRANTS' HOSP., WARD'S ISLAND, Dr. Carnochan, 3 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

BELLEVUE HOSPITAL.—On Saturday (this day), Nov. 10, Dr. JAMES R. WOOD will resect a knee-joint. This operation was deferred last week.

NEW YORK OPHTHALMIC SCHOOL.—Ninth Session. DR. STEPHENSON will deliver the Introductory to a course of Lectures on Ophthalmic Medicine and Operative Surgery, on Saturday (this day), Nov. 10, 1860, at the N. Y. Ophthalmic Hospital, No. 63 Third Avenue, near 11th street. Subject—"The Scientific Surgeon versus the mere Operator." Students of medicine and the profession are respectfully invited to attend.

NEW YORK COUNTY MEDICAL SOCIETY.—The Anniversary Meeting of the New York County Medical Society, will be held at the College of Physicians and Surgeons, on Monday Evening, November 12th, at 6 o'clock. By order

O. WHITE, M.D., President.

H. S. DOWNS, M.D., Secretary.

Original Lectures.

LECTURES ON STRICTURE OF THE URETHRA, PRELIMINARY TO THE CLINICAL COURSE ON DISEASE OF THE GENITO- URINARY ORGANS. DELIVERED AT THE UNIVERSITY MEDICAL COLLEGE.

BY
W. H. VAN BUREN, M.D.,
PROFESSOR OF ANATOMY, ETC.

LECTURE III.

In order that you may fully appreciate the gravity of the disease we are studying, I shall ask your attention, in the next place, to the consequences which most generally follow the formation of permanent stricture in the urethra, and the various symptoms to which it gives rise. The nature and source of the *gleety discharge*, one of the earliest and most frequent symptoms of stricture, has already been noticed. This may consist simply of a slight increase of the natural moisture of the walls of the canal, or it may amount to a purulent discharge, according to the extent of the altered surface of the mucous membrane, and the degree of inflammation which is present; or, it may be wanting entirely. In proportion to the amount of obstruction opposed to the free passage of urine, at first distension, and then dilatation, takes place in the urethra immediately behind the stricture. Inflammation involves the mucous membrane lining the dilated portion of the canal, causing uneasiness and pain in the perinæum, and often an increased amount of discharge. This, in the progress of events, may lead to its ulceration, or rupture, and to the consequent *extravasation of urine* into the tissues which surround the urethra—coming on suddenly and extending widely, or, advancing more slowly in the form of *perineal abscess*, and resulting in *urinary fistula*; the latter result being in some degree a conservative process, by which nature establishes a new outlet for the urine—its natural channel being in danger of total obstruction. When the prostatic division of the urethra is involved in this dilatation, inflammation is liable to be propagated along the lining membrane of the ejaculatory ducts to the seminal vesicles, and through the vasa deferentia to the epididymes and testicles, giving rise to chronic induration—sometimes to abscess. The same is true in regard to the prostatic ducts and glands. Inflammation and abscess more rarely attack the glands of Cowper. The bladder itself is liable to equally serious changes from the increased efforts which it is called on to make in order to force its contents through the narrowed canal; at first disturbed innervation, leading to simple irritability and more frequent calls to pass water; then, from prolonged contact with its walls, the urine, becoming irritant from the chemical changes which it undergoes, causes positive inflammation of its lining membrane—or *cystitis*. This morbid condition, most commonly known as *catarrh of the bladder*, is a very frequent complication of advanced stricture, and adds greatly to the sufferings of the patient. The purulent discharge from the inflamed mucous membrane of the bladder, acted upon by the ammonia of the altered urine, which results from the decomposition of its urea, is transformed into a viscid, tenacious, translucent material, generally and incorrectly called mucous, which adheres to the bottom of the vessel into which the urine is passed, and adds materially to the difficulty of voiding it. If you agitate pus from any source, in a test tube, with a few drops of ammonia, or liquor potasse, this same viscid material results; this, in fact, is one of the standard tests by which pus is recognised, when its nature is in doubt. The urine in which this alteration has occurred in the bladder is generally fishy in its odor, or often more offen-

sively fetid. Meanwhile the muscular coat of the bladder, from being constantly subjected to increased effort in the expulsion of the urine, becomes unnaturally thick and dense—or hypertrophied, and through the interstices between its reticulated fibres the mucous lining of the organ is sometimes protruded so as to form bag-like projections or *sacculi* upon its outer surface, and these in some instances attain a large size, or become the seat of calculous concretions deposited from the altered and stagnant urine.

Thus we have chronic inflammation of its mucous membrane, hypertrophy of its muscular coat, general thickening of its walls, and contraction of its cavity, as the changes to which the bladder is liable in consequence of stricture of the urethra. These changes take place slowly and often insidiously, but they are very common complications of chronic stricture. More rarely we find the bladder permanently *dilated*, generally as a consequence of over distension, or repeated attacks of retention of urine early in the history of the case; and it is in these cases of dilated bladder that we most frequently encounter *incontinence of urine* as a symptom of stricture. The ureters are also liable to dilatation, more frequently than the bladder, and this occasionally reaches an extreme degree, involving the pelvis of the kidneys: and, the same causes continuing in action, the secreting structure of these organs is ultimately invaded and so far altered as to interrupt their function. This then is one of the modes by which stricture of the urethra leads to a fatal result; death being preceded generally by symptoms of uræmia from obstructed function of the kidneys. I exhibited to the class, not a great while ago, the urethra, bladder, ureters, and kidneys of a patient over sixty years of age, who died in this manner after having suffered from stricture over thirty years; the organs showed the changes I have described in an extreme degree, the bladder being contracted and hypertrophied, the ureters dilated and thickened—one of them being almost equal in diameter to a small intestine—and the tubular structure of the kidneys entirely destroyed. The specimens before you, most of them from the surgical museum of Professor Mott, will serve to illustrate the morbid conditions which result from chronic stricture.

I have said nothing thus far of the influence of stricture in impeding the ejection of the seminal fluid; it is obvious that in serious obstructions of the canal this must in great proportion find its way backwards into the bladder, and pain in the performance of the sexual act is often complained of; and yet I am bound to say that except in very aggravated cases, the disease is not as often the cause of impotence and sterility, in our sex, as from its serious character we should be led to infer. Involuntary seminal emissions are apt to be rendered more frequent by the presence of stricture.

Patients suffering from stricture are liable, from slight causes, to suffer from rigors, followed by fever and profuse sweats. These are often provoked by the introduction of instruments into the canal; they resemble very closely the ordinary paroxysms of ague, but do not recur with the same periodical regularity, and are also, to a certain extent, benefited by the administration of quinine. A chill may occur without any subsequent fever, or a chill and febrile paroxysm, without being followed by perspiration. When they happen in connexion with retention of urine the sweating is often exceedingly profuse, and the clothing saturated with it exhales an odor of urine. They are explained by the peculiar sympathy which the nervous system manifests with diseases of the genito-urinary organs, and are often symptomatic of the various inflammatory changes which I have described. Their frequent occurrence suggests suspicion of serious disease of the kidneys, and, as a general rule, contra-indicates operative interference. The morbid conditions of the urethra, bladder, ureters, kidneys, &c., already enumerated, explain also the pains in the perinæum, thighs, groins, hips, and loins, so often complained of by patients with stricture, as well as the irritable state of nervous system which so frequently accompanies the disease. This

latter condition is aggravated, and the powers of life still more exhausted, by the inevitable loss of sleep consequent upon the necessity for emptying the bladder at very short intervals, and by the pain and discomfort which accompany the act. The straining to pass water is also liable to produce *Hernia*, or to aggravate an existing rupture, and thus the frequent coincidence of the two diseases is explained. For a like reason *prolapse of the rectum* is often present, as in patients suffering with stone in the bladder; and a person who has a bad stricture is always liable to have the contents of the bowel escape whilst voiding his urine, and is therefore compelled to provide against this contingency.

But perhaps the most serious of all the consequences of stricture, and one that is liable to obtrude itself at any period of the disease, is the occurrence of stoppage, or *retention of urine*. This very unpleasant symptom is by no means confined to the advanced stages of the disease, as might be supposed; it may occur among its earliest manifestations; in fact, it not very unfrequently happens that the first serious intimation, which the patient receives that he has a stricture, is a sudden inability to empty the bladder. After dining out, or a late supper with extra indulgence in stimulants, particularly malt liquors or champagne, a person retires to rest, and is awaked towards morning with a full bladder and an urgent desire to relieve it; he attempts to do so, but is surprised to find that not a drop will pass, and that no amount of straining will force it. The sensations which accompany this discovery are most unpleasant; the pain and pressing desire to empty the bladder increase rapidly with the conviction that it is impossible to gratify it, and finally the surgeon is sought, who uses the means proper to give relief, and informs the sufferer for the first time, perhaps, that he has a stricture, and advises him to submit to treatment for its cure. If the patient is wise and docile he follows the advice, and is soon, by judicious management, rendered secure against a second attack of retention.

But matters do not always pass in this way; patients with retention of urine and stricture are, for the most part, neither wise nor docile, and often are taught to pursue the right course only after much painful experience. Moreover, an attack of retention is not always promptly and safely relieved; want of docility on the part of the patient, or perchance, absence of the requisite knowledge, tact, or gentleness in the employment of instruments, on the part of his attendant, may occasion laceration of the urethra, and the establishment of *false passages*—a result which, I am compelled to say, happens not very unfrequently—and a case of stricture, after this occurrence, is a much more difficult and dangerous one to surgeon and patient. An attack of retention may also lay the foundation of future inflammation, paralysis, or dilatation of the bladder; it is for these reasons that I have spoken of it as one of the most dangerous complications of stricture.

The pathology of an attack of retention of urine, such as I have described, is simply this: an altered portion of the urethral mucous membrane has been left behind by a gonorrhoea; it is not sufficiently extensive or serious to have as yet occasioned any symptoms of stricture which have attracted attention—perhaps not even a gleet discharge—but nevertheless the changes described in a former lecture are slowly taking place in it. In this condition the urine is suddenly loaded with crystals of uric acids, or rendered otherwise irritating, by excess in eating or drinking, and the contact of this urine, acting as a mechanical or chemical irritant—for crystals of uric acid are large enough and have sufficiently sharp angles to irritate severely by their contact—gives rise to acute inflammation of the altered portion of the urethra, with increased swelling and sensibility, and consequent spasm, by reflex action, of the “compressor” muscle, and the organic muscular fibres by which it is surrounded. The essential elements in the local disease of the urethra, are, inflammatory swelling in its walls; and the proper remedies are, the skilful employment of a catheter, with or without the assistance of an anæsthetic

agent, to relieve the retention; and the use of alkaline and demulcent drinks, a cathartic, and perhaps a warm bath and leeches, to allay the inflammation.

Having thus detailed the principal consequences and complications of permanent stricture, I shall next enumerate the symptoms by which the disease is characterized. The first and earliest of these is gleet, of which I have already spoken; it will be sufficient to add that the presence of this symptom, in connexion with the previous existence of a gonorrhoea, in any case, is good ground for suspicion that a stricture may exist, and it renders a thorough examination of the patient proper and necessary. The next symptoms, in order, are, increased frequency of desire to micturate; pain or uneasiness in performing the act; alteration in the shape and size of the stream of urine; the necessity of a longer time to thoroughly evacuate the bladder; a sense of obstruction to the free passage of the urine, and inability to project the stream with the usual degree of force; and “dribbling,” or the escape of more or less urine after the bladder has been apparently fairly emptied of its contents. The existence of one or more of these symptoms, in addition to a gleet discharge, necessitates the physical exploration of the canal by means of appropriate instruments, and I shall proceed to describe the proper mode of conducting this examination, inasmuch as it constitutes the most valuable means at our command for establishing the absolute diagnosis of stricture.

Original Communications.

REPORT OF A CASE OF SCARLET FEVER.

DEATH FROM PERICARDITIS AND SEROUS EFFUSION IN THE PLEURAL CAVITIES. PERITONITIS.

By J. LEWIS SMITH, M.D.,

CURATOR TO THE CHILD'S HOSPITAL.

THERE is probably no disease which ends fatally in such a variety of ways as scarlet fever. Death, in this affection, may occur from convulsions, from closure of the throat through inflammation, from the yielding of the vital powers to the intensity of the poison, from mucous or serous inflammation, from dropsy, and from exhaustion consequent on the formation of abscesses in the neck. On account of these many sources of danger, epidemics of this disease are usually attended by a fearful mortality. For the same reason, also, the patient not unfrequently dies unexpectedly, since death, which perhaps was arrested when threatening in one direction, may approach insidiously in another. The following case illustrates this remark: The fever, which set in violently, was subsiding, and no untoward symptom was noticed, except pain in the epigastric region, which was also somewhat relieved. She was sitting in bed, apparently in no present danger, when her respiration became embarrassed, and within three hours she expired. The immediate cause of death was uncertain until revealed by the autopsy.

There was little of interest as regards the symptoms in this case, except as they were related to the post-mortem appearances. Vomiting, which ushered in the disease, is known to be of common occurrence at the inception of scarlet fever. I have known it present in forty-three out of fifty-one cases, of which I have records, and in three of the remaining eight, retching was observed; so that irritability of the stomach is a symptom of some diagnostic value at the commencement of this affection.

April 7th, 1860.—C., an English girl, 5 years and 10 months old, had uniformly good health, except an attack of measles, until one year ago, when she suffered from pertussis. The paroxysmal cough subsided after the usual time, but a slight cough remained. On the 4th inst. she was taken with vomiting and fever, previously to which

for a few days she had been dull, and her appetite poor. On the 5th the efflorescence appeared, the surface was hot, pulse full and quick, stomach still irritable, and the bowels confined. At night she was delirious. On the 6th there was little alteration. To-day pulse 158; respiration natural, unless a little accelerated; moderate swelling under the ears, with tenderness. Treatment: slices of salt pork to the neck; cold applications to the head; mustard pediluvia; give one teaspoonful every three hours of the following mixture: \mathcal{R} Spt. ether nitr. 3 ii.; potass. chlorat. 3 i.; syr. simp. 3 i. ss. M. 8th.—Pulse 148; is quite restless, but rational; has had five scanty dejections; urine contains granular urate of ammonia. 9th.—Pulse 124, when asleep; was not delirious through the night, and rested more quietly; passes urine freely, and the appearance of this secretion is more natural; dejections still rather frequent and scanty; continue the mixture with beef broth and other nourishing drinks. 10th.—Pulse 153; urine passed freely, and is natural; dejections still rather frequent; sits in bed a considerable part of the time. 11th.—Pulse 140; respiration moderately accelerated, but its rhythm natural; complains of a severe pain in the epigastric region, which is tender on pressure, and prominent; the respiratory murmur can be heard in all parts of the chest; resonance on percussion not materially impaired, but there seems to be a slight serous effusion at the base of the right pleural cavity; condition of the digestive organs the same. Apply linseed poultice to the epigastric region, and give pulv. ipecac. comp. gr. iii. every four hours. 12th.—Passed a restless night; pulse 130 to 140; epigastric region still the seat of severe pain, and tender on pressure; considerable distension at this point, and dulness on percussion; when asked where she feels pain, points to the throat and epigastric region; dejections still rather free, and the quantity of urine passed about natural; surface warm and the rash fading. Apply a leech to the epigastric region, and continue other treatment. 13th.—Epigastric pain less severe, but still tenderness on pressure; pulse about the same; has a slight cough, though the respiration is not materially disturbed. Continue the powders, a half or a whole one, according to the pain.

She appeared better through the morning of the 13th, sitting much of the time in bed, and talking rationally; at 3 p.m. her respiration became short and gasping, with pulse strong, and mind clear. Her voice gradually failed so that she spoke in a whisper, with an effort, and at 5 p.m. death occurred, apparently from obstructed respiration.

Autopsy, 24 hours after death.—Body but little emaciated; half an ounce to one ounce of turbid serum in the pericardium, and a recent fibrinous deposit of almost a gelatinous appearance at the base of the heart, lying at the commencement of the aorta—valves and cavities of the heart normal; from four to six ounces of transparent serum in each pleural cavity, and no fibrinous deposit on either side; mucous membrane of the bronchial tubes vascular, and muco-pus could be pressed from them; both lungs were inflated, with the exception of the posterior portion of each lower lobe, which, over a moderate extent, was dark colored, firm, non-crepitant, and of greater specific gravity than water; liver considerably enlarged, extending some four inches below the ribs; this organ congested, but otherwise of natural appearance; upon its convex surface, corresponding with the seat of the pain, was a white rough patch of fibrin, about an inch and a half in diameter; kidneys congested; stomach, small intestines, and the first division of the colon, healthy; mucous membrane of the transverse and descending portions moderately vascular and thickened, without ulcerations, the lesions evidently of mild colitis; mesenteric glands somewhat enlarged; brain not examined. Under the microscope, the blood discs and the white corpuscles were apparently in the usual proportion, but the former were disposed to aggregate. The dark and non-crepitant portions in the lungs contained exudation corpuscles; in the liver were fewer oil globules than usual.

MODIFICATION OF MR. BOWMAN'S OPERATION FOR THE CURE OF OBSTRUCTION OF THE LACHRYMAL DUCT. BY J. E. MACDONALD, M.D.

THE operation of Mr. Bowman, for the cure of obstruction of the nasal duct, has been attended with so much success, that it is important to every practitioner to avail himself of its advantages. Its first stage, however, slitting up of the canaliculus, is somewhat awkward and difficult, and would to many, unaccustomed to manipulate the eyelids, prove an obstacle to its successful performance or deter them from its attempt. This difficulty is entirely removed by a modification of this stage which I have now employed for a year and a half, and which admits of easy accomplishment by the poorest surgeon.

Mr. Bowman inserts into the punctum lachrymalium, and then passes along the canaliculus, a fine grooved director, by which he guides a small bistoury through the tube and slits it up. The canaliculus being but short, can only engage the director for a short distance from its point, and the slightest motion of it or of the patient's head, will wholly or partially disengage it, in either case necessitating a re-adjustment before passing in the bistoury, or if it occur during the passage of the knife, complicating the operation. I have therefore done away entirely with the director, and only employ a blunt-pointed, narrow, and slightly curved bistoury, the blade of which is about three quarters of an inch long, the heel about three sixteenths of an inch broad, and which tapers to a fine blunted point a very little probe shaped (see cut, a). It is sharp on its concave edge, cutting to the



point which is very narrow, and to provide for its strength, the back is somewhat stout, and delicately clubbed at its extremity.

To operate on the right eye, I seat the patient on a chair in front of me, support his head against my breast, and lift the upper lid slightly with the fingers of my left hand. I then hold the instrument between the thumb and fore-finger of my right hand vertically over the internal canthus of the eye to be operated upon, and with the ring-finger of same hand press the tarsal border of the lid against the lower orbital margin. By sliding the lid outwards along this margin, I draw out and expose the punctum, and make

the canaliculus tense and straight. I now engage the point of the instrument vertically in the punctum, then, by depressing its handle outwards till nearly horizontal, will have its axis in the direction of that of the canaliculus. Retaining the firm outward traction on the lower lid, I push the instrument forwards (inwards) traversing and slitting up the canal, the groove of which, being its own director, it will follow. When the point has reached the bony plate of the canal, in other words, has entered the lachrymal sac, I lift the instrument out, allowing it to cut its way through the tissues, thus laying open the whole extent of the canal. It is now easy to insert the probe into the sac, and pass it down to dilate the stricture.

The foregoing cut shows the knife with its point engaged in the punctum, and about being depressed from the vertical to the horizontal position.

NOTE.—The above was written previous to my departure for Europe, and was to have been sent to this Journal for publication at that time, but was forgotten. Since my return, I have learned that Mr. Bowman has for some time himself dispensed with the use of the grooved director in this operation. I heard nothing of this, however, while I was in London, although I showed my instrument to Mr. Hulke, Mr. Wordsworth, and Mr. Bader of the Moorfields Hospital, to which Mr. B. is attached, and operated with it for Mr. Hancock and Mr. Hogg at the Westminster Ophthalmic Hospital. I think therefore that Mr. Bowman has not yet published anything on this new method.

Reports of Hospitals.

NEW YORK HOSPITAL.

DYSPNOEA FROM CARDIAC DISEASE RELIEVED BY THE INHALATION OF OXYGEN.

[Reported by J. C. ACHESON, M.D., Senior Assistant.]

JAMES HEENAN, aged 22, admitted July 8th, 1860. Patient had acute rheumatism four years before, since which time he had suffered from symptoms indicating cardiac disease. At times had attacks of dyspnoea, and about six months before his admission he noticed that the dyspnoea increased, and that his feet began to swell. After his admission he had an occasional recurrence of these attacks of dyspnoea, during one of which complete hemiplegia took place, which, however, passed off under the operation of a warm enema. Under the use of diuretics the oedema of the feet entirely disappeared, and the patient was restored to a fair measure of health. About this time, however, necrosis of the tibia occurred, and a free incision was made through the soft parts from which an abundant suppuration took place.

The following extract from the Hospital records presents the interesting features of the case: "Oct. 15th. The patient has had no attack of dyspnoea since Sept. 20th. The wound in leg suppurates freely. Tongue clean, appetite good, bowels regular, pulse 80, of fair strength and regularity. Oct. 26th. Patient remained in about the same condition as described in last report until this morning, when, without any apparent cause, he was suddenly attacked with pain in the chest accompanied by severe dyspnoea and great restlessness. The usual means were resorted to, viz. dry cups and sinapisms to the chest, and Hoffman's anodyne and tr. valerian internally, but with little or no effect; the dyspnoea continuing gradually to increase during the day, and at times becoming so severe that the face assumed a dark blue color, the surface became cold and the respiration quick and short, and the patient turned violently about in the bed. At present (evening) the symptoms are as follows: Patient lies on his left side, with his head raised; surface cool and dry, face of a dusky hue, lips dark blue; is unable to speak; is very thirsty, but swallows with difficulty; pupils widely dilated and insensible to light; respiration 35 per minute; pulse about 130, very small and scarcely

perceptible at the wrist; bruit with the first sound of the heart very distinct. In both lungs the bronchial respiratory sounds are very loud, but the vesicular murmur, if present, is rendered inaudible by the noise made in the effort to breathe. Ordered the means above mentioned to be repeated as often as necessary, and carbonate of ammonia, with brandy or wine, to be administered as occasion required.—Oct. 27th A.M. Passed a restless and almost sleepless night, and this morning there is no amelioration of the symptoms, but rather an increase in their severity. He still tosses restlessly about; the surface is cold, and there is no pulse at the wrist; in other respects he is in the same condition as described in last note, except that he appears to be weaker, and at times has a low, muttering delirium. Above mentioned means still persistently used, but with little or no relief. P.M. Symptoms continuing to become gradually more severe, and the speedy approach of death being apparently inevitable, it was suggested that the inhalation of oxygen might afford relief.

"By request of the attending physician, Dr. A. H. Smith brought his apparatus for the generation of oxygen, and at about 2 P.M. he began its administration. Before the commencement of the inhalation patient's symptoms were as follows: Whole surface cold; face of a dusky blue color; lips quite black; eyes prominent, pupils widely dilated and immovable; can scarcely be aroused; is speechless, and swallows unwillingly and with difficulty; respiration about 40 per minute, short and labored; no pulse whatever at the wrist. Within 15 minutes after he began to inhale the oxygen signs of relief were apparent. The restlessness ceased; the breathing became much easier; pulse became perceptible at wrist; intelligence began to return; and waking from his lethargy, he complained of the coldness of his body, and desired more clothing. The hot-air bath was employed. The improvement in his condition continued, until, at the expiration of an hour, the following note of the symptoms was made: Surface warm and slightly moist; face almost natural in color; lips blue; pupils almost normal in size and reacting to light; answers questions intelligently, and expresses his wants; swallows without difficulty; respiration quite easy and about 25 per minute; pulse 120 and of moderate strength, though small. After this the oxygen was administered at intervals as he seemed to require it. At times he would receive it with pleasure, and would even seize the tube from which he inhaled it with avidity. He obtained some repose, and remained quite easy and comfortable during the evening and night until about 3 A.M., when he was suddenly seized with another violent paroxysm of dyspnoea, and notwithstanding the inhalation of oxygen and the employment of all other means for his relief, he speedily succumbed to the severity of his disease."

The autopsy revealed extensive disease of the cardiac valves, accompanied by hypertrophy. The left lung was entirely congested, and felt hard and firm under pressure, and did not crepitate except at its very apex. The right lung was moderately congested in its lower half, but was well aerated in the upper portion. The trachea and larger bronchial tubes were considerably congested and lined with viscid mucus. All the abdominal organs, and also the brain, were more or less congested, but otherwise healthy.

The oxygen was inhaled at about the rate of 1,500 or 2,000 cubic inches per hour, mixed with common air. During the last paroxysm the distress of the patient and the consequent extreme jactitation, rendered an efficient administration of the gas impossible.

HOSPITALS FOR CONVALESCENTS.—The *Lancet* urges the establishment of hospitals for the convalescent poor, who from being obliged to return to their work or to their miserable dwellings before they have entirely recovered, are thereby rendered again invalid. Such establishments should be in healthy localities, as by the sea-side. It states that individual subscriptions for the sick poor of London amount to the enormous annual sum of £330,000.

BELLEVUE HOSPITAL.

SERVICE OF DR. J. W. S. GOULEY.

FRACTURE OF RADIUS; UNION DELAYED BY PREGNANCY.
EPITHELIAL CANCER OF LEG.

[Reported by ESKINER MASON, M.D., House Surgeon.]

MAGDALENA BOWAG, aged 23, born in Germany, domestic, temperate, was admitted March 28, suffering from a comminuted fracture of the left radius at its lower third, involving the wrist joint. The fracture was of seven weeks' standing, crepitus plainly felt, and the carpal bones seemed as if they had been denuded of their periosteum; from the crepitus they presented when rubbed together, all power over her fingers had been lost. She received this injury by slipping upon the side-walk, and throwing out her hands in order to break her fall. When admitted, patient was in a starving condition, and was also in her seventh month of pregnancy. Besides the fracture, she presented a large abscess over the origin of the gastrocnemius muscle, extending several inches down the calf of the left leg. The abscess was opened, and nearly a pint of pus was evacuated. The limb was placed in side splints, and tonics, stimulants, and as nourishing a diet as the house afforded, were freely administered. Under this treatment her condition rapidly improved; the discharge from the abscess, which at first was very fetid, soon improved under injections of warm water, one part, Labarraque's solution, three parts; together with dressings of bala Peru and picked lint. April 9.—A bed sore made its appearance over the cuboid bone of the left foot, which soon disappeared under dressings of bala Peru and lint. For the last two days patient has been able to move her fingers. On the 18th the splints were removed, but there having been no attempt at union they were reapplied. May 5.—She complained very much of her left knee, which was now very much swollen and inflamed; leeches were applied, and also a lotion composed of opium and lead, which soon relieved her symptoms. Crepitus could still be felt in the arm. The abscess upon her leg is very much contracted, and has almost entirely healed under the above treatment. May 11.—Crepitus still apparent; at this date she was taken with labor pains, and after a natural labor was delivered of a healthy male child weighing five and a half pounds. On the 15th the splints were removed, and upon examination union was found to have taken place; the splints were reapplied, and the abscess, which had again begun to discharge fetid pus, was dressed as before. There was also a large sinus, which had made its appearance upon the inner aspect of the tibia since her confinement, which was freely laid open, and a yeast poultice applied. 25th.—The splints having become loose they were removed, and the external lateral ligament seemed to have given away, the ulna being displaced upwards and outwards. This luxation was readily reduced, and a single straight splint, with a pad under the wrist, was applied over the back of the hand and arm, and the limb firmly bound down upon the splint by bands of adhesive plaster. The ulna was thus kept in position. In about four weeks afterwards the splints were removed, and passive motion used, together with the warm douche; the patient being able to use her fingers tolerably well at this time. She remained in the Hospital till August the 16th, when she was discharged, having very good motion of her hand, and but little displacement of the ulna outwards. The radius, however, presented a good deal of the usual deformity consequent upon this class of fractures. The result, considering the nature and complications of the case, was very satisfactory. It is well also to state that after the first four days she was not permitted to nurse her child.

EPITHELIAL CANCER OF THE LEG, CURED BY THE APPLICATION
OF A CAUSTIC.

TERENCE SHERIDAN, married, aged 70, laborer, temperate, of good constitution, was admitted into the Hospital April

14, 1860, with the following history:—Thirty-five years ago he received a blow from a stone upon his right leg, on the inner aspect of the tibia, about four inches below the knee-joint. He soon recovered from this injury, being able in a few days to resume his usual occupation. The Spring following he noticed a small tumor over the seat of the former injury; a few months later another small swelling appeared by the side of the latter, which caused him considerable pain. This swelling, he states, was opened by a surgeon, and pus evacuated, and the limb poulticed, when after a few days both swellings had entirely disappeared, and he considered himself well. Eight years afterwards, what he describes as a wart, as large as his little finger nail, appeared over the seat of the old sore. This gave him no uneasiness; but a few years afterwards (the exact period he does not recollect) this wart became excoriated from the leg of his boot rubbing against it; and ever since it has gone on increasing, till now it has reached the size of the palm of the hand, and presents the appearance of a cauliflower excrescence, having reached the height in some portions of a quarter of an inch from the surrounding integument. The patient denies ever having had syphilis. April 18.—A portion of the excrescence was removed, and upon microscopical examination its structure was ascertained to be that of epithelial cancer. April 20.—An application of sulphate of zinc and sulphuric acid, in such proportions as to form a paste, was applied over the whole of the affected surface. The following day the caustic was reapplied, and the sore poulticed. On the 30th the sore presented a much better appearance, it having been sensibly diminished by the action of the caustic; the caustic was again applied, and the limb treated in the same manner as before. This treatment was continued, at an interval of every five or six days, till May the 21st, when the sore presented the appearance of a healthy ulcer, with florid granulations secreting healthy pus. It was now treated as an ordinary ulcer, being strapped and bandaged. Patient was discharged cured, the ulcer having entirely healed, a few weeks afterwards. About a month ago the patient called at the Hospital, according to request, in order that it might be ascertained whether the disease showed any symptom of returning. There was, however, no appearance of its return, and the patient was enjoying good health.

Clinical Record.

UNIVERSITY MEDICAL COLLEGE.

PROF. A. C. POST'S CLINIC.

November 3, 1899.

FALSE ANCHYLOSIS OF KNEE; OPERATION. SIMPLE HARE-LIP;
OPERATION.

CASE 7.—F. G., set. 3 years. The knee-joint flexed at an acute angle; there is also posterior displacement of the head of the tibia, constituting a subluxation; the deformity is the result of inflammation which occurred a number of months ago; there has been no suppuration of the joint; the inflammation which occasioned the deformity has subsided.

Remarks.—You have here an example, such as you will often meet with, of the unpleasant consequences resulting from carelessness, with regard to the position in which an inflamed articulation is treated. It is a very common error on the part of medical practitioners, in the treatment of inflammation involving the articulations, to allow the limb to assume any position in which the instincts of the patient may cause it to be placed. After a time, the limb becomes rigidly fixed in the position in which it has been placed, and it may be difficult, or even impossible, to place it in a more favorable position. In this manner, limbs often become deformed or distorted to such a degree, as not only to render them useless to the patient, but even to make them a positive incumbrance. In a case of this kind occurring in a young woman, a number of years ago, I was under the necessity of amputating the thigh, on account of

the annoyance occasioned by an acute angular flexion of the knee. The practical lesson which I wish to impress upon your minds is this: that when you are called to the treatment of any injury or inflammation involving an articulation, you should at once secure the limb in such a position, that, if in the progress of the disease ankylosis should take place, the most important functions of the member shall be preserved. When the knee-joint is the seat of the disease or injury, it should never be flexed at a right angle or an acute angle, but it should be secured on a double inclined plane, in a position nearly straight. If the knee be fully extended, so as to put the crucial ligaments on the stretch, the position may be very irksome or painful to the patient. On this account, a slight deviation from the straight position may be allowed, the limb being flexed at an acute angle of 150 to 160 degrees. By giving firm support to the limb, and keeping it straight or nearly so, the inflammation may be more effectually controlled, and the danger of ankylosis diminished. But the great advantage of this position is, that if ankylosis should take place, the limb will still be useful to the patient in supporting the weight of the body, and in locomotion. In cases of this kind, as in many others, you may verify the old adage, "An ounce of prevention is worth a pound of cure."

In the case before us, the mischief has already been done, and the question which presents itself is, whether the deformity can be remedied, and if so, how this result can best be accomplished. In false ankylosis, continuing after the subsidence of the inflammation which gave rise to it, there are two principal methods by which relief may be afforded. One is by the subcutaneous division of the tendons of the contracted muscles, followed by the application of a mechanical apparatus, by which gradual extension is accomplished. The other is by the administration of an anæsthetic to produce muscular relaxation, followed by manual extension as far as it can be accomplished without violence, the limb being then secured in its improved position by splints and bandages. I propose, in the present instance, the second of these methods.

[The child was accordingly placed in a recumbent posture, and was made to inhale the vapor of sulphuric ether, until complete anæsthesia was induced. The Professor then grasped the thigh with one hand, and the leg with the other, and by the application of a moderate force brought the limb into a position deviating from a right line not more than twenty or thirty degrees. He then fixed the limb in this position by the application of a splint secured by a roller bandage. The patient was then placed in charge of one of the members of the class, who was directed to see him at his house, and to readjust the bandage as often as it might become necessary.]

When this child was first brought into a state of anæsthesia, there was a copious involuntary discharge of urine. Some time after this, the respiration became stertorous, and much embarrassed. The cloths moistened with æther were then removed from the face of the patient, the door and windows of the room were opened, and the patient was fanned. The respiration was gradually restored to its normal condition. The Professor remarked to the class that there was no reason for alarm during the administration of an anæsthetic on account of irregular and stertorous respiration, if there was no flagging of the pulse, and no continued interruption of the breathing.]

CASE 8. Simple Hare-lip.—J. M., at 11 months. The case before us, gentlemen, is one of fissure or cleft of the upper lip, situated a little to the left of the median line, and extending upward from the vermilion border not quite to the nose. Fissures of this kind are quite common in the upper lip, but they never occur in the lower. The deformity is denominated hare-lip, from its resemblance to the cleft which normally exists in the upper lip of the hare and rabbit. It is the result of an arrest of development during foetal life. When there is but one fissure in the lip, it is called single hare-lip: when there are two, the hare-lip is said to be double. When the deformity is confined to the

lip, the hare-lip is denominated simple: when there is a coincident deformity of the superior maxillary bones, the hare-lip is said to be complicated. There are two species of deformity of the jaw-bones which may occur as complications of hare-lip: and these may exist separately or combined. The first is a fissure extending through the alveolar and palatine portions of the jaw. The second is an intermaxillary bone projecting forwards through the fissure of the lip. In complicated hare-lip, an early operation is important as a means of overcoming or diminishing the deformity of the jaw-bones. In simple hare-lip, it is not so important that the operation should be performed at a very early period. In operating upon a single and simple hare-lip, as in the case before us, the operation consists in detaching the middle of the lip from the jaw, in paring off the edges of the fissure, in bringing the two sides of the lip into contact, and in securing them in close apposition by sutures. The edges of the fissure may be pared off with strong scissors and with a bistoury—this part of the operation should be accomplished in such a manner that when the sides of the lip are approximated, no notch will be left at its margin. This result can be best secured in most instances by excising on each side of the cleft a semilunar portion of the lip—when the curved incisions are straightened by the application of the sutures, the margin of the lip is made to pout, and the formation of a notch is thus prevented. In more difficult cases, a flap may be dissected on each side from the margin of the fissure, as recommended by Malgaigne, and the two flaps thus formed twined downwards and united so as to project below the margin of the lip—a very excellent result may sometimes be obtained in this way. In joining the two sides of the lip, three sutures are commonly required—one of them should be a twisted suture, made by transfixing the tissues with a straight needle, and passing a thread in the figure of eight repeatedly from one side to the other under the extremities of the needle. In some cases, a second twisted suture will be advisable. Each of the sutures should include the whole thickness of the lip, with the exception of the mucous membrane which lines its posterior surface. The suture nearest the free border of the lip should pass on both sides exactly at the junction of the vermilion border with the skin. The success of the operation depends very much on the accurate adjustment of this suture. The hemorrhage during the operation should be controlled by pressure with the thumbs and fingers of an assistant.

Operation.—The Professor then proceeded to perform the operation, separating the lip from the jaw-bone, with a bistoury, excising a semilunar portion of the lip from each side, bringing the lateral portions together by means of two twisted sutures, and one interrupted suture. The junction was fortified by a strip of isinglass plaster, broad on each side where it was applied to the cheeks, and narrow in the middle, where it crossed the lip. The lip, when united, had a good breadth, and there was no appearance of a notch at its margin.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROF. PARKER AND MARKOE'S CLINIC.

MONDAY, NOV. 5, 1886.

INCIPIENT HYDROCEPHALUS. STRABISMUS; OPERATION. CARCINOMA MAMMÆ.

DR. MARKOE.

CASE 6. Incipient Hydrocephalus.—This patient is a female infant, æt. 1 year. Five weeks ago it was weaned; since that time it has been fed with bread, apples, cake, candy, etc. The child is now emaciated; there is a degree of tumidity to the abdomen that is unnatural; the pupils are dilated; there is a constant moaning cry; the fingers are clenched upon the thumbs, and the hands are in a state of continual movement; the mouth is dry and red; there is sprue; and the teeth are making their appearance. The mother informs

us that her child suffers much from thirst, and that its bowels are somewhat confined.

Remarks.—The period of weaning is an important epoch in the life of a child. From the nutriment which Nature has provided for the infant, a transition is then made to the coarse and varied diet of advancing years. The most ordinary exercise of reason would seem to indicate that such a transition should be gradual, passing, from the mother's milk, through the blander forms of nourishment to vegetable food, and arriving lastly at an animal diet. In this case the result of the course pursued is a complete derangement of the whole apparatus of digestion, producing symptoms which, if they do not point to the actual existence of acute hydrocephalus, exteriorly indicate that the patient is wavering upon the edge of hydrocephaloid disease; the ingestion of a single additional meal of the food with which it has been supplied might be sufficient to carry it fairly over the brink.

Treatment.—The first thing to be considered in this case is the diet. The child should be fed with milk that has been thickened with a little flour, for which arrowroot may be substituted, if the bowels become loose. The condition of the bowels may be much improved by the following R:—Hydrarg. sub-mur. and pulv. rhei ãã grs. ss; sodæ sub-carb. grs. i. Fiat pulvis qualis sumend. 3 in die. In addition to this, counter-irritations along the spine should be effected by friction with a preparation formed of ol. tigll, gtt. xx; æther sulph. 3iv. The child should be bathed in tepid water every day; warmly dressed, and carried in the open air as often as possible.

CASE 7. Strabismus; operation.—Christian B., æt. 14, complains of strabismus affecting his left eye, a condition first observed when he was less than one year old. On directing his attention to an object placed directly in front of him, the right eye occupies its natural position, while the left is rolled into the inner canthus; if the object be carried towards his left side, the right eye immediately falls into its inner canthus, but the left can scarcely be brought into the median plane. The sight of the left eye is also less perfect than that of the right. The condition of this patient can only be remedied by an operation, which consists in the division of the internal rectus muscle. The muscle is reached by an incision carried through the conjunctiva, near the inner canthus. This incision should be made parallel with the fibres of the muscle; if it be made perpendicularly, an unsightly cicatrix is often the result. It is also important to avoid too free division of the muscular fibres, as there is danger of producing a condition the opposite of the first—*strabismus divergens*, a deformity more unsightly than that for which the removal was attempted.

Operation.—The patient was thoroughly etherized, and the operation performed by Dr. Markoe. An incision was made through the conjunctiva; the muscle was brought into view, and raised with a blunt hook; the majority of its fibres were then divided with the scissors, but the eye did not assume a satisfactory position. After a more complete section, the axis of the affected eye very nearly corresponded with that of its fellow. Ordered the sound eye to be kept closed by a bandage, and the affected eye to be used alone for three days. The muscular action will probably bring about a perfect parallelism in the axes of the eyes.

DR. PARKER.

CASE 8. Carcinoma Mammarum.—Sophia H., an unmarried woman, 31 years of age, is suffering from carcinomatous disease of the right breast. It had existed for nine months previous to April, 1886, when the organ was removed; the axillary glands being not then affected. The wound was healed in the month of June, and the patient did well until the middle of July, when, after an interval of only six weeks, the disease reappeared. She now presents herself with three distinct points of ulceration about the cicatrix; and in the axilla there is a large,

indurated gland, which is undoubtedly the seat of carcinomatous disease.

Remarks.—This is a somewhat unusual case. It is not often that carcinoma makes its appearance at so early a period in the life of an individual; it more commonly occurs after the thirty-fifth year. This patient was scarcely thirty years of age when the disease first attracted her attention; there is no hereditary taint in her family; nor can we learn that any existing cause was apparent. The general health also seems to remain unimpaired; the functions of digestion are undisturbed; the patient sleeps soundly, and her complexion is unchanged. The question which now arises is this: Shall this person subject herself to another operation for the removal of the present manifestations of this disease? Now secondary cancer shows itself more frequently in the liver than any other organ. If, then, on further examination, it be found that the liver and other internal organs are free from disease, a repetition of the operation may be considered advisable. There are cases on record, in which carcinoma has again returned and been removed many times in succession, but those cases where the powers of Nature have not finally yielded to the renewal of the disease are rare indeed. Dr. Parker has, himself, seven times in succession, operated upon an individual for the removal of cancer.

JOURNALS FOR NOVEMBER.

NORTH AMERICAN MEDICO-CHIRURGICAL REVIEW.—NOV.

ART. I.—Origin of Ovariectomy; with an account of the Life and Services of the late DR. EPHRAIM McDOWELL, of Kentucky. By the SENIOR EDITOR.—The five cases were originally reported to the Kentucky State Medical Society in 1852, and published in the transactions of the Society for that year. **ART. II.—Cases, with Remarks, from the Surgical Clinic of the Jefferson Medical College.** Service of PROF. GROSS.—Two cases of spina bifida are reported, both treated by making a slight puncture in the sound skin about an inch and a quarter from the base of the tumor, the instrument carried subcutaneously into the tumor, and one drachm of the contents allowed to escape, after which a solution containing one-eighth of a grain of iodide, and one quarter of a grain of iodide of potassium in one drachm of water was injected, the puncture closed by the twisted suture, and painted over with collodion, and the recumbent position on the abdomen enjoined. Both terminated fatally. **ART. III.—Foreign Body in the Right Bronchus; Tracheotomy; Removal and Recovery.** By DR. JOHN ADLER of Davenport, Iowa.—The patient, aged about seven years, sucked a piece of pipe-stem into the glottis, from whence it was forced through the larynx into the trachea, and finally lodged in the right bronchus. The trachea was incised for about an inch in length, and efforts made to extract the pipe-stem with a pair of slender forceps, which proved unsuccessful, owing to the difficulty of expanding the blades, and the hardness and roundness of the foreign substance. At length a loop of iron wire was passed down, and withdrawn bringing the pipe-stem with it, as we remove with a loop of twine a cork from an empty bottle. **ART. IV.—A Case of Prolapsus Uteri, followed by violent Metritis and Peritonitis; Recovery.** By DR. GUSTAVE G. ROY, of Essex Co., Va. **ART. V.—Grave Sequelæ of a Renal Calculus.** By DR. W. H. TRIPLETT, of Woodstock, Va.

SOUTHERN MEDICAL AND SURGICAL JOURNAL.—November.

ART. I.—Tertiary Lime Formation of Georgia. Continued from October Number. **ART. II.—Case of Inflammation of Os and Cervix Uteri cured by the Caustery.** By DR. P. WADE DOUGLAS, Dublin, Ga. **ART. III.—Diphtheritis.** By DR. C. A. HARTMANN, Cleveland, Ohio.—A brief historical notice of this disease, with a glance at the principal authorities of the present day.

American Medical Times.

SATURDAY, NOVEMBER 17, 1860.

MEDICAL CHARITIES.—DISPENSARIES.

DURING the year 1859, the five Dispensaries in this city provided medical attendance for a hundred and thirty-four thousand four hundred and eighteen persons, who required and received gratuitous medical care. And in addition to this vast number of beneficiaries, nearly as many more have received similar gratuitous attentions at the hands of our medical brethren, in public hospitals, and in the humble abodes of the needy. Such are the spontaneous charities of Medicine, as exercised in every city in Christendom.

True benevolence has always found its largest field and its most worthy objects among the sick poor. And while the heart of philanthropy enjoys the sure reward of that unfading gratitude, which tenderly repeats, "I was sick, and ye visited me," the same voice also says, "the poor ye have always with you." It is the privilege and the mission of the medical profession to minister its charities more constantly and more abundantly than falls to the lot of men in other professions; and like the rain that heaven sendeth upon both the just and the unjust, the benefactions of the medical profession are bestowed upon all classes of the needy, without reference to the moral and social qualities of the recipients. Silently and certainly the sick poor are continually receiving the unpaid and most skilful ministrations of the healing art; and in this good work a large proportion of the best physicians among us have at some period been engaged, devoting to their Dispensary service their best energies and the most studious care. But the honor of projecting and sustaining our city Dispensaries has, from the first, been shared largely by philanthropic merchants and other citizens; and with gratitude our Dispensary physicians can unite in testimony to the hearty co-operation, the excellent plans, and the efficient administration of the Boards of Managers.

The five Dispensaries in this city are all united and harmonious in their operation; they are, in fact, the natural offshoots of the central institution—the New York Dispensary—which was organized in 1790, by a few benevolent citizens of that day, "for the purpose of relieving such sick, poor, and indigent persons, as are unable to procure medical aid." Though for some years that institution depended for support solely upon a few contributors, who, by virtue of such aid, had the exclusive right to designate the particular individuals who should receive their benefactions, as still is the case in many of the British Dispensaries, the charity was ultimately made free to all the needy; and immediately after the introduction of the practice of vaccination in this city, by Dr. Valentine Seaman, in the year 1800, a Vaccine Department was established in the Dispensary, and thus, in connexion with the public benefits otherwise conferred, the institution justly earned a claim upon the Municipal Government for the pittance that has annually been paid from the city treasury towards the incidental expenses of the Dispensary buildings. But all the institutions continue to be purely voluntary organizations, and

they are under such a judicious system of management as to insure their perpetuity, harmony, and public utility. The humane plans and purposes of the original founders of this noble system are carried out in each of the five institutions; and so effectually are they in operation, that from the Battery and the two river sides to the Central Park, there is not a home of poverty that has not been sought out by the visiting physicians of the Dispensaries; while there flock to these associated institutions upwards of a hundred thousand patients every year, more than ten thousand of whom receive vaccination. And since the first organization of our Dispensary system, the total number that have received medical services from the Dispensaries amounts to upwards of *two millions one hundred and fifty thousand*.*

We need not inquire what are the peculiar benefits resulting from these admirable organizations for dispensing medical charity. We may truly say they are incalculable, and that the aggregate individual benefits are far exceeded by economic, sanitary, and other secondary results. And it is a fact that should be generally understood, that the Visiting Physicians of our Dispensaries are really the only Health Wardens in the city. It is true they lack the title, and possess no executive authority, but they have for many years constituted a voluntary sanitary police—a corps of sanitary inspectors or searchers, and the only ones in New York.

We have deemed it proper thus to advert to a few facts that relate to the public health, and to a department of medical labor which happily illustrates the spirit and mission of our profession. It may be regarded as an interesting and instructive fact, that these purely voluntary associations for dispensing medical charities constitute to-day one of the best Dispensary systems in the world. It is highly efficient, and gives excellent results; it commands the highest talent, and it is conducted with less difficulty and expense than any other system. With a mortality of only one per cent., and at an average cost of less than sixteen cents for each patient, these thousands of the sick poor are furnished with medical treatment under this system; and at the same time the germs of pestilential diseases are continually being destroyed, and a vast amount of useful counsel and friendly aid is constantly and unostentatiously bestowed in the homes of ignorance, poverty, vice, and sorrow. But, with all its excellences, our Dispensary system is not perfect, either in theory or practice; nor have physicians or philanthropists yet devised a plan completely adapted to make our medical charities and Dispensary labors contribute most effectually both to the immediate welfare of the needy, and to the sanitary, social, and economic advantage of the public.

In a subsequent number we shall make some practical suggestions respecting our city Dispensaries, and the extension of these medical charities to other and wider fields of usefulness.

THE WEEK.

In the September No. of the Cincinnati *Lancet and Observer* was published a "brief history of the causes which led to

* Of this number, nearly two hundred and thirty thousand have received free vaccination. For the leading statistics of these Dispensaries during the year 1860, the reader is referred to page 364 of this Journal.

the dissolution of the late Faculty" of the Medical College of Ohio. This publication was ostensibly made for the benefit of those who were aware "that this old institution has been in a state of disorganization, owing to the resignation of the Faculty, shortly after the close of the last session." As many of the readers of the MEDICAL TIMES, in common with ourselves, were desirous of being informed of the nature of these difficulties, we published the material portion of that statement. In the October No. of that journal we were honored with a responsive answer to our wish for the prosperity of that college. We afterwards learned what, indeed, appeared upon the face of the original statement, that it was the version of but one party to the quarrel, and that the trustees of the school had, on two occasions, sustained the opposition. It seemed but right that the party who had not been heard at all should have the benefit of at least this acknowledgment, which we accordingly made. This has wrought a sudden change in the *Lancet and Observer*, and in the November issue it devotes a page to our special illumination. Its material points, with the answers suggested, are:—1. The MEDICAL TIMES has been "misinformed." It is possible. 2. It has sadly departed from "editorial courtesies belonging especially to medical journals." We make no distinction between the "courtesies belonging to medical journals," and those belonging to gentlemen; but we wish it distinctly understood that we neither profess nor practise the editorial courtesies of the *Lancet and Observer*. 3. The statement concerning the late difficulty in the Medical College of Ohio was the truth, and nothing but the truth, and was "endorsed by five gentlemen, whose truth and veracity is not doubted in Cincinnati." We merely suggest, that the testimony of a witness is not rendered more reliable, by constant asseverations of his reputation for truthfulness. 4. We are advised "henceforth to preserve a dignified silence in regard to any little difficulties we may have in the medical family in this city." We are quite willing to comply with this advice, provided the *Lancet and Observer* shall cease to gossip about them in public. 5. The notice in the TIMES, that the "statement" was made by one party to the quarrel, "may yet cause its editor some sorrow." This we should, of course, regret. 6. The editor of the Cincinnati journal "knows the source of our information." Deplorable, but we cannot help it. 7. A prayer "to be delivered from temptation." What peculiar temptation besets that journal does not appear, but we hope sincerely that the prayer may be answered. 8. A threat "to write some truths," which charity, heretofore, "has induced us to withhold." Charity cannot be better employed than in covering the sin herein contemplated. 9. "The decency and truth, honor, learning or position of the legitimate profession of Cincinnati is not represented in *one man*." The readers of the *Lancet and Observer* will be gratified to learn this fact. 10. "Neither the late Dr. Caldwell nor Professor Gross were at any time lecturers or professors in the Medical College of Ohio." The *Lancet and Observer* had done well not to have republished our errors.

Finally, we have a word for the *Lancet and Observer*. While we are forbidden noticing the little difficulties in the medical family of that city, which it so officiously retails to its readers, that journal takes a sort of maternal interest in the character of distant institutions, and has recently, without the slightest provocation, and without a word of

inquiry as to the truth of its statements, arraigned one of our most respectable medical institutions for a gross violation, not only of the rules of the American Medical Association, but also of the laws of the State in which it is located. We refer to the Long Island College Hospital, of Brooklyn, New York. Its charge was as follows: "The Faculty of this school, at its last commencement, conferred the degree on a gentleman from this city who has been studying medicine one year." This statement was based upon the authority of the *Lancet and Observer*, and "the general understanding of all who knew the gentleman." There was, therefore, no positive evidence of the truth of this charge; but there was sufficient evidence of its falsity, to an impartial mind, in the character of the gentlemen composing the Faculty of the Long Island College. The courtesies of society would lead an aggrieved party to seek a private explanation of the conduct of the offending party, before publishing a disparaging statement, while the Courts would compel the former to produce documentary, or other evidence, to justify its charges. But "the editorial courtesies belonging especially to medical journals," as practised by the *Lancet and Observer*, permit the publication of a disparaging statement, founded on rumor, and the cool request that the party, so scandalized, prove the charges false, before it ceases to reiterate them. This statement, so unjust and so injurious to that rising school, has now been circulated by the *Cincinnati Journal* nearly three months; and though the truth of the charge has been emphatically denied "after a full investigation," by the very person to whom they appealed, yet in their November issue they "reiterate the charge," and persist in demanding that the Long Island College shall bring forward documentary evidence to prove that their utterly groundless assertions were false. Such courtesies in social or political life would have a very different settlement from that here desired. The *American Medical Gazette* of this city, has characterized that statement as a slanderous assault upon the Long Island College, pronounced the charge "false and libelous," and indicated the cause of this attack. This defence of the school brings down upon the head of its editor a perfect avalanche of "editorial courtesies belonging especially" to the *Lancet and Observer*, concluding with the threat that next year at Chicago "we and a goodly number of Western men will look Dr. Reese and those he represents in this matter, in the face, and demand the documentary evidence in the case." Meanwhile, we deem it our duty, and but an act of justice to the College thus aspersed, to inform the profession that no school is more rigid in its rules of graduation than the Long Island College Hospital. In the present instance, a candidate presented himself without certificates of the full term of three years' study, owing to the absence of his first preceptor in Europe. In lieu of a certificate, he made the following affidavit, and was of course allowed to graduate. We may also add that he graduated with distinction, and was immediately appointed Professor of Chemistry in the Medical College of Ohio.

STATE OF NEW YORK, }
County of Kings, } ss.
City of Brooklyn. }

On the Eighteenth Day of July, A.D. 1880, before me personally came Charles O'Leary, to me known, who being by me duly sworn, did depose and say, that he resides in the City of Cincinnati, in the State of Ohio, and that he

has been studying Medicine for the past THREE YEARS with Doctors Blackman and Clendinnin, of said City of Cincinnati.

Sworn before me this 18th day of }
July, 1866. } CHAS. O'LEARY.

JOHN STEUART, *Comr. of Deeds.*

Since the above was written, a communication from one of the Editors of the *Lancet and Observer*, to the authorities of the Long Island College, has been shown us, acknowledging the receipt of a satisfactory explanation from the school, and promising, "though late," to set it right in the next (December) number.

THERE is, at length, some hope that religious journals may be awakened to a sense of the wickedness of advertising the villanous preparations of quacks, and allowing themselves to become the messengers of these ministers of evil. That money lies at the root of this evil, we have never had a doubt, and the fact is confirmed by the following extract. The *Christian Advocate*, of Nashville, Tenn., has been induced with the power of resisting the temptation with which these advertisers seduce the unwary religious journals of the country, and make them the powerful and efficient abettors of their crimes. We commend to the *N. Y. Examiner*, which has lately manifested some interest in the ethics of advertising, the following extract from that paper, and the pertinent comments of the *Nashville Journal of Medicine and Surgery*:

"WHAT SAY THE DOCTORS NOW?—The regular physicians complain of papers, especially family papers, for publishing advertisements of patent medicines, hair tonics, and such like. Now we have done finally with the last advertisement of the sort. *We refuse them at any price.* Some very tempting offers have been made to get into our advertising columns lately; but we stand to the rule. Will the Doctors, and all who have disapproved of those advertisements, now stand up to us? Mark it, those advertisements *paid* well. They were a cash article. Patent medicines have helped papers if they never helped patients. Will those who approve of our present policy secure us increased patronage and substantial aid, to the extent we have thrown away by adopting it? Come, let us hear from you."—*Christian Advocate.*

Well, here is what we say. Sir, we honor you for taking a whip and driving these thieves and money changers from your sanctum. It was no place for them. Yes, sir, we will stand up to you like men, for we stand now together, upon the same platform, against villanies in general, and this *ne plus ultra* of villanies in particular. You say you have thrown away money by it. So have we. You and we will both be poorer in money by it, but we hope infinitely richer in grace, and must alike look for our reward in that glorious place where thieves cannot break in, being barred out by absolute statute, and where sickness and nostrums cannot come. We assure you, reverend sir, that much of our income resulted from trying to patch up constitutions ruined by quack medicines, the virtues whereof were certified to by ministers of the gospel, and the certificates, and very often an editorial puff, published in the religious papers. We congratulate you upon washing your hands of the whole matter. It is what honorable men had a right to expect of a great divine, placed at the head of a paper capable of achieving perhaps more good for mankind than any other paper in America. It is said, reverend sir, that wherever God's work is progressing, the devil is sure to be present. Upon this philosophy alone have we ever been able to reconcile ourselves to the existence of a Devil's department of quack medicines in a religious newspaper. We recognised the incongruous association as a sort of sad

necessity. We are most happy to know that you intend demonstrating that the Lord's business can be successfully conducted without the aid of the Devil. In which good work may the Lord, Angels, and all good men protect and defend you.—*Nashville Jour., Med. and Surg.*

Progress of Medical Science.

OBSTETRICS AND DISEASES OF WOMEN.

By E. NÖGGERATH, M.D.

On Uterine Polypi.—BLAZINA of Prague. (*Allgem. Wiener Med. Zeit.* '60.)—While it has been customary with authors to call every tumor, in connexion with the texture of the womb a polypus, we now distinguish, from a histological point of view, the following varieties.

1. *Vesicular polypi*.—Those, in the normal state, almost imperceptible mucous follicles of the womb, the utricular glands, are subject to a sort of dropsy, thus representing tumors, which are called vesicular polypi. They are of rare occurrence, and have their seat most commonly in the mucous membrane of the vaginal neck. The greatest number of these polypi are nothing but largely developed ovula nabothi; their size seldom exceeds that of a hazel-nut. In most instances several follicles are developed at the same time, they push the mucous lining forward, and drag it out into a sort of peduncle. According to the growth of one or more of these cryptæ, they are called simple or compound vesicular polypi. Both kinds appear in the shape of small, hard tumors with a thin pedicle, inserted in the vaginal neck; at first they are of a yellowish-red, and afterwards of a greyish color interspersed with black spots. At times one of these tumors bursts open, discharges its contents, but is filled up anew. The so-called tubular polypus is nothing but a compound vesicular one. The same holds good for the papillary variety, which is at the same time very vascular.

2. *Cellular polypi*, called by Dr. Malgaigne *cellulo-vesicular polypi*. A limited portion of the submucous cellular tissue becomes hypertrophied in such a manner that the mucous lining of the cervical canal is raised, so as to form a tumor, which consists of a large amount of thin and dilated bloodvessels, which give rise to repeated hemorrhages. The surface of these polypi is of a dark red or violet color, and they are of a soft texture; they are often combined with the vesicular variety.

3. *Hypertrophic polypus*, generally called *flesh-polypus*, is a peculiar form of sarcoma uteri; not only the submucous cellular tissue, but also part of the muscular layer are hypertrophied; the microscope shows fibrillæ and elements of the muscular tissue.

4. *Fibrous polypi* are either developed in the cavity of the womb, or in the cervix, be it from the submucous tissue or from the proper substance of the uterus itself. In the former class the mucous lining is raised above its natural level to such an extent, as to gradually form a peduncle; by the growth of these polypi the cavity of the womb becomes distended, the vaginal portion shortened, and in some cases dilated sufficiently to allow the protrusion of the tumor into the vagina.

All the different forms of polypi just described may be counted among the benign tumors; malignant polypi are constituted by carcinoma and by the so-called *cauliflower-excrecence*, the latter being only a variety of alveolar cancer.

The diagnosis of uterine polypi is at times surrounded with a great many difficulties. As long as a polypus is inclosed in the cavity of the womb, it is sometimes impossible to recognise its existence. The surface is smooth in cellular, sarcomatous, and fibrous polypi; only when they are combined with a cyst, which had emptied its contents,

there exists an opening at the base, that might be mistaken for the os uteri. The shape of the polypi is generally that of a pear or a spherical body; the polypus is in most instances movable, and can be made to descend by straining the abdominal muscles. These polypi do sometimes come off spontaneously, their peduncle being compressed by the os uteri, in consequence of which stoppage of circulation and gangrene sets in. Even intra-uterine polypi with a thin peduncle drop off occasionally and are transformed into calcareous masses.

The removal of these tumors is effected by tearing or twisting of the peduncle, by exsection, and by the ligature. Endometritis and phlebitis in consequence of tying a polypus are only to be dreaded in those cases, where a portion of the uterine tissue has to be included in the ligature. The application of the *ecraseur* is not always free from the danger of hemorrhage, while the galvano-caustic apparatus is too expensive to be recommended to the profession, and often injurious to the parts surrounding the polypus. As a general thing the ligature offers the best chances of success.

On Affections of the Hip-joint in consequence of Uterine Disease.—Hoppe. (*Pr. Ver. Ztg.*, N. F. iii. 2: 1860.)—The author reports two cases of women, one unmarried and forty-five years of age, one a widow, thirty-six years old, both of whom had been suffering for a length of time from a disease of the womb, and an affection of the hip-joint. The principal symptoms relating to the latter are:—1, pains which occupy the whole of the thigh, especially in its anterior and exterior aspect, or only in the circumference of the trochanter; they are very intense, lasting through day and night with very short intermissions; 2, contraction of the adductor muscles, and of some of the flexors. Both symptoms are referable not so much to an affection of the joint itself, as to an irritation in its neighborhood; this becomes more likely by the fact that there exists no deformity about the nates.

As a further proof of the statement that the named affection was owing to a disease of the womb, Dr. H. remarks that he has frequently observed painful sensations around the trochanter, in connexion with uterine disease. These patients complained of a sensation of pressure and burning in the region of the trochanters, which diminished gradually, and finally disappeared under a treatment adapted to the disease of the womb. The author points to a fact, more generally known, viz. the occurrence of gonalgia as a consequence of morbid affections of the womb.

On Uncontrollable Vomiting in Pregnancy.—Bichelot, Bardot, and Dufar. (*Schmidt's Jahrb.*, Aug., 1860.)—In No. 40 of the *Union Médicale*, Dr. Caradec reports the case of a woman who suffered from uncontrollable vomiting, and asks for information as to further treatment. The patient is a young woman, married a short time ago, and in the third month of gestation; she throws up everything she eats, and even small quantities of water cannot be retained; she suffers from obstinate constipation, sleeplessness, great prostration; emaciation far advanced, pulse 120 in a minute, increased temperature of the skin. The patient had been ordered to take antispasmodics, sulphuric ether, ice, opium, amara, pastilles de Vichy, tincture of iodine, potio riveri, baths, etc. None of these remedies appeared to have the slightest effect towards controlling the vomiting, and under these circumstances, the author wants to know whether he would not be justified in inducing abortion.

Dr. Bichelot, in the name of the other editors of the *Union*, replies, that the first thing to be recommended was to bring about a free action of the bowels by purgative injections; the great weakness of the patient would not make out a contra-indication, considering that in similar instances the spontaneous occurrence of a diarrhoea had been known to act very favorably on the vomiting. Moreover, a careful examination of the uterus would be desirable, because the presence of certain morbid affections or dislocations of the womb was often the only cause of the disturbed action of the stomach. A number of cases are on record where, after the successful treatment of granulations, or after the

reposition of a displaced uterus, the vomiting had ceased at once. According to Bretonneau, the symptomatic vomiting of pregnant primiparæ is owing to a rigidity of the womb, which hinders the gradual development and expansion of this organ. Taking this latter idea into consideration, it would be worth while to try the local application of belladonna, be it by applying the same in the form of a wash to the abdominal walls, or by rubbing the os uteri with the extract of belladonna. Notwithstanding the fact that the patient has hitherto thrown up everything that she had partaken of, it is of importance not to discontinue the administering of food. There are examples extant, where patients rejected all kinds of easily digestible substances while they retained other articles which were expected to have a most injurious effect. The patient therefore ought to be allowed to eat or drink whatever she might take a fancy to. In order to enable the stomach to retain its contents, it would be of service to have the patient take equal parts of the extractum thebaicum and e. stramonii, either immediately before or after the meals. For the same purpose Dr. Hamelle recommends strychnia combined with calcinated magnesia; Bago recommends calomel in small doses, exhibited until the gums become affected; he administers this remedy three times a day, combining each dose with 15 drops of chloroform. Finally, Dr. Chaillay-Honoré's proposition must be mentioned, viz. to put a large piece of ice on the epigastrium just in the moment when the vomiting is threatening to commence. If, however, the vomiting should appear with a certain periodicity, the quinine ought to be allowed to have a fair trial. Considering the reduced state of the patient's strength, neither general nor local depletion can be thought of, while iced brandy or champagne in sufficient quantities to produce a slight degree of intoxication, will be of advantage. As to indications of abortion, it must be considered that in cases where death has appeared to be inevitable, the vomiting has ceased all of a sudden, and pregnancy proceeded up to the full term, while artificial induction of labor does not always prevent a fatal issue, even if it were performed successfully as regards the delivery of the fœtus.

Before Bichelot's answer had been received, Dr. Caradec tried the belladonna. But not an hour had passed after the extract was applied to the vaginal cervix, when the most alarming symptoms of belladonna poisoning appeared. To check the progress of this intoxication a large dose of opium was injected into the rectum, when the worst phenomena disappeared, but at the same time vomiting returned. A few days afterwards Dr. C. tried the *decoctum album Sydenhami*, which was retained entirely. (The prescription for the decoctum album is as follows: \mathcal{R} cornu cervi raspat., panis albi, aa $\frac{3}{4}$ ss; coque c. aq. font. \mathfrak{h} iii ad tertie partis consumpt; colat. add. gummi mimos. pulv. \mathfrak{z} ii. —E. N.) Ever since the administration of this remedy, a steady amelioration of all the morbid symptoms could be perceived; the patient partook of beef-soup, light vegetables, etc., nay, her appetite increased so much that she could hardly be restrained from eating more than was prudent. She gradually recovered her strength, and the healthy sleep which she now enjoyed made him hope to see her soon restored to her former state of health, when she was taken suddenly, on the 7th of January at 5 o'clock P.M., with a violent headache and a strong fever. These symptoms gradually increased to such an extent, that she became delirious and died at 11 o'clock A.M. of the following day, notwithstanding everything was done to prevent the fatal result. The post mortem examination was not permitted.

With regard to the value of artificial induction of abortion in cases of uncontrollable vomiting, Dr. Bichelot remarks that, according to Dr. Cazeaux, it must be considered a remedy which can be rarely depended upon. Notwithstanding a record of four or five successful cases obtained from English accoucheurs, it must be taken into consideration, that the number of unsuccessful ones is unknown, and of seven cases which came to the notice of Dr. Cazeaux,

only one has been successful for the mother, while the six remaining had a fatal result. This verdict of Dr. Cazeaux appears to Dr. Bichelot somewhat unjust, especially when we consider that in many of the fatal cases the operation had been resorted to at a period when the strength of the patient had been sufficiently undermined to deprive her of all chances of recovery. And here the important question presents itself, Which was the right moment for the performance of the operation? a question, the discussion of which must be left to the discretion of the physician in every single case; because, up to the present time, our experience in this matter is restricted to such a limited number of cases that it would be unsafe to lay down fixed rules for further action.

Dr. Bardot reports two cases of the most obstinate vomiting which was promptly overcome by a few doses of pepsin.

Dr. Dufar had often successfully applied, in similar cases, a douche of steam, produced by evaporating an infusion of aromatic herbs, and directed towards the epigastric region. The steam must be applied as hot as it can be borne for ten or fifteen minutes; the place is then covered with a towel dipped in cold water. This procedure must be repeated several times in the course of 24 hours. In some cases dry cupping or the electric battery insured a doubtful success of the foregoing plan of treatment.

Reports of Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Wednesday Evening, Oct. 10.

DISCUSSION OF DR. HAMILTON'S PAPER.

(Continued from page 339.)

DR. COATES coincided to a great extent with the speakers who had opened the debate. He alluded to certain charges which had been brought against him in former years, of using enormous and dangerous doses of opium, in delirium tremens. He published an article on this subject in 1824, which had been misconstrued, and quoted against him in later years. After alluding at some length to the subject of delirium tremens, and its treatment, he referred to the advantages derived from the use of opium in rheumatism. He preferred in these cases, a Dover's powder, made up with nitrate of potassa in place of the sulphate. He urged the necessity of intermitting the use of opium when it required a long continuance, in order that the system might recover from the effects, and also lest it become a habit. This was particularly necessary in consumption.

DR. CONDIE regarded this remedy as one which could least be spared. Among the contra-indications for its use, the lecturer had not mentioned the presence of congestion of the lungs, which opium has a tendency to increase. In moderate doses, along with expectorants, it generally relieves the violence of the cough in bronchitis and pneumonia, but care must be taken lest its too free use diminishes to too great an extent the secretion of the parts involved, and thus dangerous consequences be induced. In illustration of which, he related the case of a minister, who, under the hands of a quack, had the cough stopped by opium, but shortly died from the suffocation produced by this sudden check of the bronchial secretion. On account of this action of the remedy, he would anticipate good results from its use in cases of effusion into the bronchial canals. In children, he had always found this article badly tolerated, even in minute doses. When employed by parents or nurses, as is too frequently the case, to quiet these little patients, it checks the nutritive functions, and as he had repeatedly seen, causes the child to assume an old and withered look. His experience had shown that about

the same dose is required by the rectum as by the mouth, and he feared a different belief had more than once led to a fatal result. When, however, it is combined with an oil in the enema, as melted butter, its effects are less powerful. He had always supposed that in children the vascular and nutritive systems were most active, and that hence this class of patients suffered most from diseases of these functions, the nervous symptoms being secondary, the result of reflex action. With these views, he could not regard opium as potent for the prevention of or allaying convulsive actions. It has not answered our expectations in chorea, epilepsy, puerperal eclampsia, or infantile convulsions. After the convulsive action has passed, opium in moderate doses may prove useful. In cholera, he regarded it as a most efficient means of controlling this formidable disease. From his experience, it held a prominent position in all forms of cholera. In a paper in one of the continental medical journals, after the epidemic of 1849, "on the treatment of cholera," statistics show that of the various plans of treatment, the per centage of recoveries favored that in which opium held a prominent position. The same was shown in Dr. J. K. Mitchell's report to the American Medical Association in 1850. He considered that opium was a powerful agent in all inflammatory affections, after the acute stage had been overcome. In simple acute peritonitis, he believed opium was an all-important remedy, after direct depletion to a proper extent. He closed with the general remark that the value of this agent did not consist only in its power of allaying pain, and nervous irritation, and of procuring sleep, but in addition, it possesses other powers of a directly curative character, which alone would command a very high rank in the list of therapeutic agents.

DR. HAMILTON, in reply to the remarks of the speakers, reiterated certain precautions and contra-indications already given in his paper. He alluded to a case as illustrative of the benefit derived from injections of laudanum in infantile convulsions, the result of dental or intestinal irritation. The child, a year old, had had some twenty convulsions. The usual means failing, he gave an enema of starch with ten drops of laudanum. No more convulsions followed, and from that moment the patient rapidly improved.

DR. REMINGTON, (having called Dr. Nebinger to the chair,) objected to opium in children, as it impaired the tone of the organs of digestion, and had a decided tendency to the brain. He related a case of cholera infantum in the winter season, induced by the long continued use of laudanum to relieve colic and cause sleep. Under good diet, and the absolute interdiction of the opiate, a rapid recovery took place. Indiscriminately used in the diseases of children, it causes convulsions, constipation, and determination to the brain. In cases of extreme suffering from stranguary and irritable bladder produced by blisters, he regarded enemata of a teaspoonful of laudanum in flaxseed mucilage as a highly efficacious, and almost infallible remedy. In purely nervous pain, it is almost indispensable. In *mania-a-potu*, he had employed it along with alcoholic stimuli, to the extent of 5-6 grains every hour, for six or eight hours, but not always with a happy result. In dysentery it is particularly useful to relieve the tormina and tenesmus.

DR. DARRACH remarked upon the combinations of opium. Its utility is greatly increased when combined with cinchona and its salts, the salts and oxide of antimony, mercury, camphor, ipecacuanha, etc. Opium with bark is a favorite remedy, and especially is it advantageous in the apyrexia of epidemics. During this interval, the thirtieth of a grain of sulph. morphia with two grains of sulph. quinia hourly, produces a tendency to sleep, augments the efficiency of the anti-periodic, weakens and shortens the subsequent exacerbation, prevents a degeneration of the blood, and secures a favorable crisis. Opium, with antimony, allows sleep in the evening exacerbation, sustains the strength, and prepares the system for the tonic in the approaching apyrexia. With calomel after bloodletting it is most reliable, in the abdominal phlegmasia, etc. With ipecacuanha it quickly relieves

the tormina and tenesmus of dysentery; and by the addition of calomel, removes the congestion of the portal system, re-establishes the flow of bile, and virtually forms a specific in this disease. Of Dover's powder, we need make no comment. He preferred the rectum to the stomach, for the administration of opium, nor was it necessary to increase the dose.

DR. THOMAS would like to ascertain the views of those present as to the relative dose of opium to produce the same effect by the skin, the mouth, and the rectum; as well as the comparative value of opium and the salts of morphia, and the propriety of their use in diseases of the brain. The teaching of Trouseau, adopted by the lecturer, that morphia is more prompt in its action when introduced by the skin, than by the mouth, he could not adopt. He regarded a teaspoonful of laudanum by the rectum as excessive, as he had repeatedly seen more decided soporific results from an injection of forty-five drops, than from twenty-five drops, or one grain of opium taken internally. In one case, fatal stupor had followed an enema of a tablespoonful. With reference to the relative merits of opium and morphia, he asked attention to the fact that chemists are satisfied with eight per cent. of morphia from opium. Hence, if the alkaloid be the sole active agent, one grain of it should equal twelve and a half grains of crude opium. But as we all know that one grain of morphia is not stronger than five or six of opium, we may reasonably infer that other active principles must be present. He questioned the propriety of withholding opiates in diseases of the brain. Names sometimes mislead. The stimulation of opium in full doses is but transient, being followed by enduring sedative effects which are often specially indicated in the diseases. He related three cases occurring at the Episcopal Hospital under his care, where disease of the brain was present. In two the tympanic membranes were ruptured, with other alarming lesions from external violence. After the primary reaction had subsided, in each case, one-quarter grain of morphia with three grains of conium was given every three hours, for several days, and with satisfactory results. No coma appeared, the pulse remained natural, and no delirium manifested itself. All recovered in due time, the result being due, in a great measure, he believed, to the perfect rest secured for the brain. In idiopathic disease of this organ, he felt no hesitation in using the same remedies, after depletion.

DR. MORRIS had hoped to hear something of the *modus operandi* of the drug. He advanced the hypothesis that it acts directly only on the nerve centres of sensation, producing in them a more or less complete paralysis. A solution of opium applied to a sentient surface, causes local anaesthesia to a greater or less extent. Administered in moderately large doses, this becomes general. No increase or diminution of motor power is observed. At first the pulse is quickened, but it soon becomes slow and full. Respiration is impeded, the blood is imperfectly aerated, the respiratory centres of the medulla oblongata become affected, and the desire for respiration is no longer perceived. It becomes slow and slower, the blood becomes carbonized, the brain, lungs, liver, and heart are engorged, and death ensues from asphyxia. Is this engorgement due to the primary action of the drug, or the depraved state of the blood, brought about by the insensibility of the nervous centres? By obtunding the sensibility of the nerve centres, we may often prevent exhaustion in patients; on this principle alone is to be explained the so-called alterative powers of opium in chronic inflammation. Mr. Skey has shown the advantage of opium rightly administered in chronic ulcers of the leg. If we suppose an irritation is produced by the sore in the posterior grey matter of the spinal cord, from which an influence is sent by the anterior root, dilating the blood-vessels of the part, as seems to be proved by recent researches, we can easily comprehend that an agent capable of allaying the irritability of the nerve centre will allow of the restoration of the natural calibre of the blood-vessels, and the consequent amelioration of the patient.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, SEPTEMBER 12, 1860.

E. KRACKOWIZER, M.D., President, in the Chair.

VEGETATION UPON MITRAL VALVE—NO OTHER CAUSE FOR DEATH.

DR. FINNELL exhibited a heart taken from a man aged fifty-five. He was a tailor by occupation. While in the act of dancing one evening, he suddenly complained of faintness, and very soon afterwards expired. The post-mortem examination disclosed the existence of a small vegetation upon the aortic valve, a little larger than a mustard seed. All the other organs of the body were examined, and found to be in a healthy condition.

DR. DETMOLD was hardly inclined to consider the small vegetation referred to, a sufficient cause for sudden death.

DR. KRACKOWIZER remarked that the left ventricle appeared to be hypertrophied and slightly dilated, but it did not seem to him that such a condition of things was dependent upon so small a deposit.

DR. FINNELL stated that in making post-mortem examinations where even a small amount of disease of the heart existed, it was customary, when no other lesion was found, to refer the cause of death to that organ.

PERIOSTEAL TUMOR OF INFERIOR MAXILLA.

DR. FINNELL presented a second specimen, which consisted of a portion of the lower jaw taken from a man thirty-eight years of age. He was a healthy laborer, and had been in the enjoyment of excellent health up to three months ago, when a small swelling appeared in the outer surface of the jaw midway between its angle and symphysis.

This gradually increased in size, and in the course of a couple of months became very painful; so much so, that he was compelled to walk the floor during the most of the night. He finally made up his mind to submit to an operation for its removal, and accordingly entered St. Vincent's Hospital for that purpose. On admission, the tumor was firm, elastic, and occupied the position already referred to—was about the size of a hen's egg, and very much shrunken. I decided on taking away a portion of the jaw with it. The bone, however, was found to be uninvolved, the growth only being periosteal in its origin.

CRURAL HERNIA—OPERATION.—ENTERITIS.

DR. BRIDGON presented a specimen of the parts involved in hernia. On the 14th of last month Dr. B. was called in the evening to visit a German woman fifty-four years old, married, and the mother of several children, who had been five days previous under the care of a medical gentleman of this city. She had been suffering from the symptoms, as the physician supposed, of bilious colic; and not before the morning of the fifth day was any tumor in the groin detected. The patient had suffered from the usual symptoms of strangulated hernia, viz. obstinate constipation and vomiting. When Dr. B. saw her she was very much exhausted in consequence of excessive vomiting; the pulse was one hundred. On examining the right groin, a tumor was discovered overlapping Poupart's ligament at about the junction of its inner and middle third; it was tense, but more movable than those tumors generally are. An attempt was made at reduction by several medical gentlemen who were present, but without avail. The patient was then placed under the influence of ether and the usual operation for crural hernia performed by Dr. Bridgdon. On dividing the tissues down to the sac, and isolating it, another attempt at reduction was made and likewise failed. On passing the index finger well up on the neck of the sac its point was insinuated under some dense ligamentous bands, and on the division of these bands the contents of the sack were very easily reduced without opening the sack itself. The wound was closed by sutures, and morphine was administered. The vomiting then ceased, and the

woman was apparently freed from pain—she, however, gradually sank and died thirty-three hours after.

The *autopsy* was made eight hours after death. The whole wound had united by first intention, and on separating its edges no sac was discovered. On opening the abdominal cavity there were no signs of peritoneal inflammation present, but there were evidences of the existence of *intense enteritis*. The whole small intestine was injected from within twelve inches of the ileo-cæcal valve, to the duodenum. On making an incision through its coats the mucous membrane was found to be softened, and at some points actual ulceration had taken place. These ulcerations existed in the centre of those patches (Peyer's) where the injection was the greatest. The sac was found inverted, protruding into the abdominal cavity, and to its fundus was adherent a portion of omentum.

I presume that the sac had been thus inverted by the traction of this portion of the adherent omentum by the increasing tympanitis previous to death, and by the peristaltic action of the intestine. The intestines from one end to the other were minutely examined, and not the slightest trace of strangulation was discovered; whether any portion of the intestine had been contained within the sac during life, I am unable to say. The patient had suffered from the symptoms of hernia for nine or ten years, but never wore a truss. Until about four days before I saw her she was always able to reduce the gut.

Dr. DETMOLD in this connexion cited the following case:—A few months ago a physician of this city sent me a patient with strangulated hernia. I called to see the case and found a middle-aged woman with a small, firm, strangulated hernia, which could not be reduced. An operation was decided upon, and she was placed under the influence of chloroform, but just as the first incision was about being made the husband came in, and, being slightly intoxicated, objected to the expedient. I was compelled to leave the woman unrelieved. A few hours after this the man became a little sobered and consequently changed his mind. I was then sent for, and being unable to respond to the call, requested another physician in the neighborhood to attend in my place. The physician went with the intention of operating, but *as soon as he touched the tumor the hernia reduced itself*. I have not the slightest doubt but that the administration of the chloroform caused the reduction. The hernia had been strangulated two days before I saw the case.

In answer to several questions, Dr. Briddon made the following additional statements in relation to his case: The patient had been treated by active cathartics, but they were returned by vomiting. There were no evidences that could be relied on of the presence of intestine in the tumor. Dr. B. was under the impression that the enteritis first made its appearance, and that the strangulation was caused by the efforts at vomiting, thus aggravating those symptoms which already existed.

Dr. KRACKOWIZER remarked that it would be interesting to ascertain whether the enteritis was due to the remedies administered, or to the condition of the contents of the bowels. It sometimes occurs that patients who have had strangulated hernia die very soon after the operation, not so much from the effects of peritonitis as from exhaustion. In these cases we sometimes find the mucous membrane of the small intestine very much injected and also softened. He has thought that this state of things was owing to the acrid character of the contents of the bowels, as the result of the strangulation, producing local inflammation and ulceration. The first evacuations are sometimes so acrid as to make the eyes water.

Dr. MARKOW stated that one practical point of interest in connexion with the case was the condition of the mucous inflammation following the operation, which, inasmuch as there were no evidences of the presence of the intestine in the tumor, it could hardly be supposed was caused by strangulation of the omentum. I have verified in my own experience that acute severe inflammation of the intestines

does sometimes follow after an operation, which, however, we are very apt to overlook in our anxiety for peritoneal inflammation.

Dr. BRIDDON remarked that the condition of the sac, as revealed in the post-mortem examination, was a point which interested him particularly, and suggested the idea that it might be desirable in similar cases where the contents could be reduced, to invert the sac with a view of producing a radical cure.

THE PRODUCTS OF MISCARRIAGE—MEMBRANES INFILTRATED WITH BLOOD.

Dr. KRACKOWIZER presented a specimen of a foetus and envelopes which were expelled two months before by a woman thirty-eight years of age. She was the mother of eight children, enjoyed an average degree of health, and her courses were always regular. She had weaned a child eight months old about the middle of June, 1858, in consequence of her menses having been established. The performance of this function was regular up to the latter part of that year, when she miscarried. The attendant hemorrhage was quite severe, but yielded to the application of astringents. In four weeks after this her courses reappeared, and she was regular up to January, 1860, when they ceased. At that time she made up her mind that she was pregnant, in consequence of her great aversion to meat; this was always an infallible symptom with her. When she was, as she thought, six weeks advanced in gestation, she strained herself in attempting to reach something, and at the same time experienced a sharp pain in her right side low down. This pain, however, was of short duration. After this she commenced to have an appetite for meat again, but her menses did not appear. About the middle of June, being very much terrified by a portion of the ceiling falling down, she noticed a day or two after a bloody spot on her linen. This slight discharge continued to show itself for a fortnight, when on the 4th of July flooding came on, which continued until the 13th, when I saw her. She was then very much reduced. When I made a vaginal examination, I found that the uterus was almost in a transverse position in the pelvis. The cervix was thickened and enlarged, and os externum was so open that the mucous lining of the cervix was seemingly drawn outward. For the purpose of ascertaining positively the source of the hemorrhage, a uterine sound was introduced; it entered the cavity of the organ to the extent of 4½ inches. I could then move the uterus in any direction. I thought that she would abort in time; advised her to keep a horizontal position, and gave her astringents. Three days subsequently, on the 16th of July, she was taken with pains in the afternoon, and about six o'clock she expelled this mass. With one of the last pains a small quantity of fluid, amniotic in character, came with a gush; then this mass, which was ovoid in shape, having the cast of the uterine cavity. On its side there was a crack, by enlarging which a little cavity was discovered. The walls of this cavity were uneven, and marked with a number of protuberances, varying in size from a pea to a hickory nut. A thin whitish membranous layer covered all these prominences, dipping down into the interspaces. In this cavity also lay a loose folded pear-shaped sac of thin membrane, and when this was split open it was seen to contain a foetus which was about half an inch long. The cord made a couple of very sharp twists near the abdomen, and then with long spirals continued to the extent of three-quarters of an inch, until it was lost in the substance of the coagulum. The coagulum on the outside was of a greyish yellow color interspersed with a red tinge, but upon the inside it gave the appearance of bright fresh clot. The insertion of the umbilical cord is still evident.

There are several points of interest in this case. The main portion of the mass is undoubtedly coagulated blood, and the loose and collapsed sac which had been voided with one of the last pains is the amnion. There were no traces either of the chorion or decidua. The amnion under the microscope showed the structureless material. I could

not detect the presence of any epithelium. The thin membranous layer which covered the protuberances was undoubtedly nothing but a thin film of coagulated fibrine. There were on the upper periphery of the mass, imbedded in the coagulum, three cysts from the size of a hemp seed to a small pea, which resembled those of which the hydatid moles are composed. Now my theory is, that the foetus died when the woman had the pain in the lower part of the abdomen from the strain, and that while lying as an inert mass in the womb the decidua and chorion through a process of retrograde metamorphosis disappeared, with the exception of the hydatid mentioned. The foetus is undoubtedly six weeks old. Now if it had died at the time the woman noticed the first bloody discharge from the vagina (middle of June) her pregnancy would have commenced at the beginning of May. But I maintain that from that time until the commencing abortion it was impossible for the chorion and decidua to be absorbed entirely. We must then assume that the cessation of the menses in January, and the other rational symptoms, indicated pregnancy. That the foetus died the middle of February without inciting the womb to expulsive contractions, and that it was only the formation of concentric coagula around the amnion, and the consequent increase of the size of the ovum, which finally induced uterine contractions.

The Society then adjourned.

Correspondence.

LOSS OF MEMORY OF NAMES AFTER INJURY OF HEAD.

[FOR the following interesting case, we are indebted to PROF. HENRY, of the Smithsonian Institution, Washington, to whom it was communicated.—ED. MED. TIMES.]

"SIR—I beg leave to report to your institution a case which fell under my immediate observation last Spring. A man residing in the town of Don Fernandez de Zaso (New Mexico), received in a rencounter a severe blow on the left side of his head, extending across the cheek bone and the ear. He was badly stunned for a time, and rendered, for some two weeks, what would be called addle-headed. Much blood settled beneath both under eye-lids. The eye-balls were also a good deal blood-shot, and his hearing was affected. Some three weeks after the occurrence, he seemed to be pretty well relieved (or in progress of relief) from the effects of the blow, except that he had entirely (I might say) lost the power of recollecting proper names. He could not remember the names of his most familiar acquaintances; and when I last saw him he had provided himself with paper and a pencil, and, as occasion required, was setting down the names of persons and places. Whether the person was absent or present, made no difference. I am satisfied there was no fraud or false pretence in the matter. I was in the same house with him about two weeks, and examined him thoroughly to see if there were any trick in the matter. The affair of the fight was also fully investigated in court, in which I was engaged as counsel, thoroughly satisfying myself of the man's sincerity. His name was William Betts. He was born at Nashville, Tennessee, and his father's name was John Betts; the only names he could recollect were those of his father, Nashville, and his own name. Common names he recollected without any apparent difficulty. He is a miller by trade, has been a little dissipated, and is between thirty and forty years of age. I have not heard whether his memory has returned or not. Does his case throw any light upon phrenology?

Very respectfully,
S. M. BAIRD.

ALBUQUERQUE, NEW MEXICO, July 26, 1890.

DOMESTIC CORRESPONDENCE.

CHICAGO.

Nov. 9, 1890.

In my last communication, no mention was made of the Chicago Charitable Eye and Ear Infirmary, an institution deservedly enjoying the confidence and patronage of this city and the northwest. It was inaugurated in 1858, under the auspices of a board of trustees, two attending, and two consulting surgeons. Patients are attended and furnished with medicine gratuitously. Dr. E. L. Holmes, a graduate of Harvard Medical College, and for some time a student at Vienna and Paris, where he paid particular attention to diseases of the eye and ear, under the instruction of Desmarres, Sichel, and Jaeger; and Dr. E. Powel, a graduate and present demonstrator of anatomy in Rush Medical College, are the attending surgeons. Professors Brainard and Freer are the consulting surgeons. The past success of the infirmary, its increasing patronage, the real want of an institution of that kind, and the exertions of its numerous friends, particularly of its medical officers, insure its permanency, and place it first among the most noble charities of our city.

The two medical schools here have formally opened, and are now in successful operation. The Rush Medical College (old school) began under more favorable auspices than at any other term. The attendance during the preliminary course in October was larger than anticipated, and on the first day of the regular session seventy-five students had already matriculated. The introductory address was delivered on Wednesday evening, Nov. 8, by Prof. Blaney. The clinical advantages to students attending this school are of the first order, six regular clinics being given weekly, two medical and four surgical. During the last session Prof. Brainard, who has charge of the surgical wards at the City Hospital during the college term, performed, in presence of the class, one amputation at the hip joint, one at the shoulder joint, one resection of knee joint, one of elbow joint, and numerous minor operations, besides treating fractures of nearly every variety. In addition to the City Hospital, the students have access to the United States Marine Hospital and college clinics. The Summer course of this institution will begin soon after the close of the regular session, and continue four months. The same clinical instruction will be continued throughout the entire term. The new school (Medical Department of Lind University) began its second annual session on Monday, Oct. 8, by an introductory from Prof. Byford. The number of students, thus far, is less than last winter, and the experiment of establishing a new system of study, rather discouraging to those who inaugurated the new plan of "elevating the standard of medical education."

The general health of our city, as usual, is excellent, affording very little encouragement to new comers of the profession, and rather discouraging prospects to those already located here. Diphtheria still prevails to a moderate extent, and in one case which came under the writer's observation not long ago, was followed by paralysis, affecting first the muscles of the soft palate, and thence extending its influence gradually to the extent of producing in regular order amaurosis, deafness, entire loss of mobility of the upper and lower extremities, together with considerable impairment of sensation. The primary disease subsided some time in advance of the paralytic affection, and at the time I saw the case the throat and fauces presented a healthy appearance.

A case of more than usual interest to the profession is now on trial in the Circuit Court of our city. The plaintiff, in the case, is Dr. A. Fisher, a regular physician, of good standing, and about twenty-five years in practice. The defendant is H. O. Stone, a man of considerable wealth and influence. The plaintiff was called upon to attend the wife of the defendant in her first confinement, April 9, 1858. The labor lasted three hours, and in the report of the case, contained in the *Chicago Medical Journal*, made

by the plaintiff, it is stated that nothing unusual occurred, except a severe pain in the right side, between the fourth and fifth ribs. The plaintiff visited the patient daily after her confinement until April 19, ten days, when convalescence was so far established that he discontinued his visits, with the request to be recalled if any untoward symptoms occurred. On May 7, eighteen days after the last visit, and twenty-eight days after the confinement, he was recalled to the patient, on account of her flowing. He advised rest, cold externally, and astringent injections. These affording only temporary relief, on the 18th of May, thirty-nine days after her confinement, he made a digital examination, and, "to his utter astonishment, found the uterus completely inverted, with the fundus resting on the perineum." The plaintiff continued to attend the patient until the 14th of July, when she went east to place herself under the care of some hydropathic institution. She remained under treatment at the "water cure" nearly two months, without experiencing any benefit. She next consulted Dr. Potter, of Geneva, New York. Dr. P. at once recognised the difficulty, and by means of an instrument of his own invention succeeded in restoring the organ to its natural position on the 14th of October, 1858, six months after her confinement. Recovery rapidly followed, and in less than two weeks she was able to return home. In March, 1859, nearly a year after Dr. Fisher was first called upon to attend Mrs. Stone, he (Dr. F.) prosecuted Mr. Stone for slander, alleging that he (Mr. S.) had used every means in his power to injure his (Dr. F.'s) character as a professional man, by misrepresenting his medical skill in general, and the treatment of this case in particular. He claimed damages to the amount of twenty thousand dollars. Since March, 1859, both parties have been actively engaged in preparing for the trial. Depositions have been taken of Professors Miller, Meigs, Bedford, Delamater, Quackenbush, and Lee, to the amount of nearly two thousand pages of lawyer's cap. Professor White, of Buffalo, and Dr. Potter, of Geneva, are here as witnesses for the defendant. The profession of this city are greatly interested in the result of the case, many of whom are retained as witnesses. It may be of interest to know that Mrs. Stone was confined in July (1860) last, without any unusual occurrence before, during, or after labor.

PITULA.

FOREIGN CORRESPONDENCE.

Letter from DAVID P. SMITH, M.D.

EDINBURGH.

Oct. 15.—I saw at the Royal Infirmary an infant eight months and a few days old, apparently in very good health and spirits, upon whom tracheotomy had been performed for croup, five weeks previous, by Dr. Bell. The operation was done as a *dernier resort*, when the child was in *articulo mortis*. The inner canula of a small double tracheotomy tube was inserted, and had been retained until the present writing. Symptoms of suffocation still supervene upon any attempt to re-establish the natural passage of air. The child, however, appears so perfectly well, that it is highly probable that but a short time longer will supervene before the air will pass *per vias naturales*. Having done the operation twice myself, with, however, only temporary relief, the case interests me much, and I shall take great pleasure in reporting its further progress. I also saw applied Syme's modification of Dupuytren's splint for fractures of the leg bones. It is a simple narrow board, padded to fit the front of the limb, from the knee downwards, and shaped at the instep like the upper part of a stirrup-iron. It will readily be seen that the projecting points of the board on each side of the foot prevent any lateral displacement, and a sling bandage, extending from the lateral points behind the heel, easily rectifies any displacement backwards.

Oct. 16.—To-day I visited the boy upon whom I had applied Dr. Lewis A. Sayre's splint for morbus coxarius, and found him free from all appearance of disease. His case is briefly this:—Robert Richardson, five and a half years old. Last January symptoms of morbus coxarius began to come on; Mr. Syme saw him in the course of the Spring, and, according to the parents' account, pronounced it a well-marked case of hip-disease. Desault's splint was used, and kept applied for thirteen weeks without extension. According to the parents, no benefit was perceptible. When I was asked to see him there was evidence of advancing disease. Frequent starting at night, nates flattened, pain referred to the knee, and great suffering induced by striking upon the heel or trochanter. The nights were particularly distressing, the little fellow sometimes screaming from the starting of the limb every half hour or so. I applied Dr. Sayre's splint on the 11th of Sept. Immediate relief followed. His nights became quiet, all pain ceased, and his general health rapidly improved. Determining to test the possibility of keeping up extension and counter-extension for a long time, which is here desired, I continued powerful extension all the time, visiting the patient, however, only once in four or five days. Nothing was done for three weeks but to occasionally increase the extension. No excoriation was caused by the extension, but a band, going around thigh and splint, simply to keep it together, was suffered, through inattention, to cut through the skin. At the end of two weeks and six days from the date of its application I removed it, to see if there would be any return of the symptoms. Now, October 16, the boy bears rude handling of the limb, and rapping on the heel and trochanter without the slightest complaint, and is greatly improved in general health. I still confine him to bed, but I look upon the cure as complete. The prominent points of the case are—1st. The utter inutility of Desault's splint. 2d. The immediate and entire relief afforded by Dr. Sayre's splint. 3d. The ease with which powerful extension was borne. 4th. The little attention absolutely required of the surgeon. 5th. The great improvement in general health which followed the removal of irritation. Although personally unknown to Dr. Sayre, it gives me pleasure to thus publicly testify to the merits of his improvement in the treatment of this dreadful disease. I shall take great pleasure in introducing this instrument to the notice of the profession in the other cities I purpose visiting.

Oct. 17.—To-day Mr. Syme performed amputation at the ankle-joint for strumous disease of the tarsus. The operation was neatly done with a short heel flap. He disarticulated at the ankle before sawing off the malleoli. Having practised the operation upon the subject, I have come to the conclusion that it can be more rapidly and neatly accomplished by not disarticulating. Dr. Watson promptly reduced a dislocation of the shoulder, of two weeks and three days standing, in a woman, under chloroform, with the heel in the axilla.

LONDON.

Oct. 20, 1888.

At the last meeting of the *Medical Society of London*, Dr. Richardson read a highly interesting paper on the *Physiological and Therapeutical Properties of the Peroxide of Hydrogen*. Though this agent was discovered upwards of forty years ago (in 1818), by Thénard, and has been much studied, its true character has not been understood. Dr. R. has devoted a year to the investigation of its properties, and not without some most important results. The chief points of interest in his paper are:—1. A striking relation between peroxide of hydrogen, and ozone. 2. Its great power of oxidation. When it is added to venous blood, the latter at once assumes an arterial color. It is remarkable that its oxidizing power ceases in the presence of narcotics and alkaloids. 3. It has the power of suspending cadaveric rigidity. 4. Its therapeutic properties require further investigation, but it seems adapted to those cases

where death seems due to deficient oxygen; diabetes is a disease in which the author considered it especially applicable, as this disease depends on deficient oxidation of organic materials. 5. It should be administered in distilled water, and may be combined with acids, and the muriated tincture of iron, but alkalies and carbonates are incompatible. Much interest was manifested in the paper, but the subject was so new that nothing of interest was elicited by the discussion which followed. I saw a rare luxation of the elbow-joint recently at the Middlesex Hospital, which terminated favorably. It was a *complete* lateral displacement of both bones, externally, with exposure of the joint. The reduction was easily effected, and the patient made a good recovery, with very good use of the joint.

Medical News.

APPOINTMENTS.

ABBOT HODGMAN, M.D., Physician to the City Prison, New York, in place of Dr. Covil, deceased.
JOHN SIMMONS, M.D., Assistant Physician to the City Prison, New York.

PERSONAL.

Dr. CHARLES D. SMITH, of New York, has returned from a European tour.

Drs. C. P. RUSSELL, and WILLIAM F. HOLCOMB, of New York, are at present in Paris.

Dr. GEORGE LEWIS, of New York, has gone to Minnesota, on account of incipient pulmonary phthisis.

Dr. S. TEATS, late Surgeon to the Steamer Fulton, has resigned his position, and established himself in practice in New York.

Dr. LANGSHOW, of Cambridge, Mass., who joined the Arctic expedition at the last moment, has returned, leaving the vessels frozen in the ice off Greenland.

Dr. C. M. RUBLEE, of Vermont, is about to visit the seat of war in Italy.

Prof. JAMES P. WHITE, of Buffalo, N. Y., was on the witness's stand two days and a half in the trial now in progress in Chicago, known as the Fisher case; and is reported to have done himself great credit.

MARRIAGES.

JANES—YATES.—On Sunday evening, Oct. 14, by the Rev. Peter Stryker, EDWARD H. JANES, M.D., of this City, to JANIE M., daughter of James D. Yates, Esq., of Williamsburgh, L. I.

DEATHS.

COVIL.—On Sunday, Nov. 4, at New York, JOHN C. COVIL, M.D., Physician to the City Prison, æt. 52. Dr. Covil was appointed physician to the City Prison in 1847, by the Common Council of New York, and retained the position until his death.

NEW YORK ACADEMY OF MEDICINE.—The anniversary meeting was held on Wednesday evening, Nov. 7, in the hall of the Historical Society. The oration was delivered by the President, DR. JOHN WATSON, to a select audience.

NEW YORK MEDICAL COUNTY SOCIETY.—At the Annual Meeting of this Society, held Nov. 12, the following officers were elected for the ensuing year:—*President*, Dr. H. D. BULKLEY; *Vice President*, Dr. ALFRED UNDERHILL; *Recording Secretary*, Dr. HENRY S. DOWNS; *Corresponding Secretary*, Dr. A. S. PURDY; *Treasurer*, Dr. BENJ. R. ROBINSON. It is stated there are now about four hundred and fifty members living, and that the Society has had six hundred members.

St. NICHOLAS SOCIETY.—At the Annual meeting of this

Society, Drs. EDWARD L. BEADLE and JAMES R. WOOD were elected Physicians; and Dr. JOHN W. FRANCIS and JAMES ANDERSON, Consulting Physicians.

CASTLETON MEDICAL COLLEGE.—This school commences its Sixtieth Session on the last Thursday of February.

THE BRITISH MEDICAL JOURNAL, the organ of the British Medical Association, advertises for an Editor in the place of Dr. ANDREW WYNTER, resigned.

THE JAMAICA QUARTERLY JOURNAL OF MEDICINE, SCIENCE, AND ARTS.—We have received the first number of this Journal. From the preface we learn that it is twenty-five years since the old Jamaica Journal ceased to exist. The present effort to establish a Medical Journal in that Island seems to be well sustained.

NEW PUBLICATIONS.—*Morel's Manual of Histology*, translated and edited by Prof. W. H. VAN BUREN, is about to be issued by Bailliere Brothers. *Virchow's Cellular Pathology* is announced for republication by De Witt & Co.

ANALYST FOR THE CITY OF LONDON.—Dr. Letheby has been appointed by the authorities of London as public analyst; his duty being to analyse the food, etc.

THE LATE DR. ADDISON.—The will of this eminent physician was lately admitted to probate, and the personalty sworn under £60,000 by one of the Executors.

We learn from a morning paper that a communication has been received from Mr. N. Hatch, of Egremont, Mass., by the Commissioners of Charities and Correction, proposing to present to the City of New York four hundred acres of land, situated in Ulster County in this State, for the exclusive right and benefit of the children of the poor of New York who are thrown upon the city for support and protection. The benefit will be extended to such worthy and proper persons of both sexes as may be selected by the Commissioners. The property is to be placed in the hands of trustees, four of whom will be appointed by the Commissioners of Public Charities. The matter is under consideration.

MEDICAL STUDENTS AND SECESSION.—A large number of Southern Medical Students, attending lectures at the University Medical College in this city, held a meeting on Friday evening, November 9, to consider what course they should take in view of the results of the late election. Several Southern gentlemen, temporarily in the city, addressed the meeting, some urging their immediate return home, others counselling moderation. Dr. J. MARION SIMS, who was present, made the following remarks as reported in the *World*:—

He said that until about an hour ago he did not know of the intention to hold this meeting. His heart was with the South—he dearly loved it, as the place of his birth. He was no politician, and knew nothing beyond his profession, but he came there for the purpose, as a Southerner, and sympathizing with them, to advise and to offer them the counsel of a brother—of a father, for he was old enough to be the father of any of the young Southerners present—but he advised them to wait patiently and not to be precipitate. He was waiting when the proper time came to leave all here, his business, his interests, his reputation, what little he had made, and return to his own native State. Although a resident of New York, he still regarded Alabama as his home, for his estate lay there—his negroes were there, and when Alabama needed the assistance of her sons he was ready to return. He advised them to wait until their respective States had declared to leave the present Union. He then advised them heartily to go to their homes and protect the interests that were dear to all Southerners in whatever country or State they might be placed in. He said they were not among enemies. Let them look at their hospital advantages here. The South had just as good medical schools as the North, but this city had better hospital advantages than any other. He advised the students not to throw them away. There was not a more rabid secessionist in the room than himself, and the only difference between them was on the subject of expediency. When the proper time came, he was for going with

the rest—this was when the States seceded. It was a duty of every young man there to his parents, to his country, to remain in this city until their State seceded. Let them wait till their State called them to the defence of the South. There were good and glorious men at the South, who could grapple the animal by the horns. He hoped the students would not leave hastily, and when the time came he was ready to go with them.

Resolutions were offered, which were passed, after being modified to read as follows:—

Resolved, That we consider it our bounden duty to return to our homes as soon as any of the Southern States secede.

Resolved, That we congratulate the citizens of New York city on their manly vote for the President and other officers, and will gratefully remember them in their devotion to the Union.

On Tuesday, November 13, the Southern students attending the New York Medical College, held a similar meeting. From the same paper we take the following extract:—

Prof. Raphael, a native of Virginia, was called upon to address the meeting. He did not consider that the election of Lincoln was a sufficient cause for the students to relinquish the superior advantages afforded by New York to medical students. Politics and a medical education should be kept distinct from each other. He thought the present aspect of affairs in the South was not legitimately the immediate result of any political influence, but a turbulent state which a lot of alarmists had been plotting and planning for a long period, in order to profit by it in some way or other.

The committee then came in and offered the following resolutions:

Whereas, At a recent meeting in this city, of Southern medical students, efforts have been made to induce them forthwith to abandon the college and return to their homes, for political reasons, in view of the recent Presidential election, and its possible results; therefore,

Resolved, That the class in attendance at the "New York Medical College and Charity Hospital," including a number of Southern men who are sojourning in New York in the pursuit of medical education, and for which purpose they have left their homes, and entered upon the lectures now in progress here, can see no reason for such rash and abrupt measures as those recommended, until the respective States of the South to which we belong, shall determine upon their course of action; or until we shall receive instruction from home that it is expedient to return.

Resolved, That as several of our professors are Southern men by birth and education, and none of them sympathize with sectional politics either North or South, and that as no prejudice against the South is entertained by any of our professors or fellow-students, we have no just pretext for forgetting the clinical and other advantages we are enjoying here in cultivating our profession.

Resolved, That we remain at our posts, and counsel our Southern brethren in other Northern schools to do so, until duty to our respective States shall summon us away from our studies at the call of patriotism, when we pledge ourselves to obey, as loyal citizens of the Southern States.

Prof. Reese, a native of Maryland, urged the adoption of the resolutions, and expressed the hope that they would recognise no political distinctions until there was something growing out of them that would affect their devotion to science; then there would be a just pretext for throwing up their studies.

After spirited remarks by Profs. Gardner and Budd, both of New York, the resolutions were put and carried unanimously.

TO CORRESPONDENTS.

Operations upon the Living Horse.—If you will look at "Old Wine in New Bottles, or the Spare Hours of a Student in Paris" you will find a quite minute description of the operations upon the living body of the horse, at the Veterinary School at Alfort, France, alluded to in this week's MEDICAL TIMES.

Nov. 12, 1860.

A. K. S.

Canada.—We have made very careful inquiries, but can learn nothing of interest.

Criminal Abortion.—"I cannot sufficiently express my approbation of the resolutions of the Scott Co. Medical Society, of Iowa. They hit the nail precisely on the head. If all our Medical Societies, state, county, and voluntary, would take similar ground, the evil might be checked."

PHILADELPHIA, Nov. 13, 1860.

EARNEST.

Knight.—The objectionable passages must be stricken out.

High Attenuations.—"I heard a homeopathic teacher of materia medica to-day, relate the following case to his pupils: 'A lady in Buffalo sent me for medicine, to remove an acute disease under which she was suffering. I sent her three pills, each one containing a minute quantity of

sugar, and the sixteen hundredth attenuation of sulphur. I directed her to take one pill every morning. She took No. 1, without experiencing any effect from the remedy; she took No. 2, and wrote me that it produced such an effect that she refrained from taking the third pill without my advice. I directed her to take the remaining pill, and on reading a letter from her a short time after, to my utter astonishment, she said she was entirely cured of her malady. Gentlemen, it is not for me to tell how it cured, but I know it did cure. There certainly could not have been much of the drug present; in fact, I know there was very little. This is another instance of high attenuations possessing curative powers over the old school system of dosing.'"

Nov. 14, 1860.

S.

COMMUNICATIONS have been received from:—

Prof. PLINY A. JEWETT, Ct.; Prof. A. K. GARDNER, N. Y.; Dr. HOMER HITCHCOCK, Mich.; Dr. R. SCHOFIELD, N. Y.; Dr. J. L. MASON, N. Y.; Dr. GEO. K. AMERMAN, Ill.; Dr. JOHN K. LEAMING, N. Y.; Prof. A. JACOB, N. Y.; Dr. W. GILFILLAN, N. Y.; Dr. J. J. MATTHEWSON, Tenn.; Dr. J. B. WOLFE, Va.; Dr. R. WALLACE, O.; Dr. A. B. KING, Tenn.; Dr. J. E. REEVES, Va.; Mr. J. A. PIERCE, Mass.; Dr. J. Y. BECHTER, Pa.; Dr. J. E. CLAIGETT, Va.; Dr. J. BURKE, N. Y.; Dr. WEATHERLEY, Ala.; Dr. C. PREBBLES, N. Y.; Dr. S. H. FRENCH, N. Y.; Dr. H. MICHELL, N. Y.; Dr. A. E. GOODWIN, Ill.; Messrs. A. WILLIAMS & Co., Mass.; Dr. G. RIDGELEY, N. O.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 8d day of November to the 10th day of November, 1860.

Deaths.—Men, 86; women, 59; boys, 88; girls, 88—total, 321. Adults, 145; children, 176; males, 174; females, 147; colored, 9. Infants under two years of age, 114. Among the causes of death we notice:—cholera-infantum, 2; infantile convulsions, 25; croup, 13; diphtheria, 10; diarrhoea, 6; dysentery, 4; scarlet fever, 17; typhus and typhoid fever, 9; consumption, 48; small-pox, 6; droopy of head, 6; infantile marasmus, 15; inflammation of brain, 9; of bowels, 8; of lungs, 19.

OCT. AND NOV.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General di- rection of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10	In.
4th.	29.80	.87	49	44	54	6	9	SW.	4	.87
5th.	29.86	.07	55	43	61	6	9	SW.	1.5	
6th.	29.81	.07	47	30	58	5	8	SW.	2	
7th.	29.94	.11	45	30	50	7	11	NW.	2	.04
8th.	29.97	.07	45	37	50	8	11	NW.	1	
9th.	29.90	.79	44	38	50	4	6	NE.	10	
10th.	29.26	.47	46	44	48	2	6	NE.	10	.89

REMARKS.—4th, wind fresh all day, skies clear, P.M.; 5th, wind fresh, A.M., light, P.M. rain, evening; 6th, wind fresh, A.M., light, P.M., rain, 9 A.M.; 7th, fine day, wind fresh, A.M., moderate, P.M.; 8th, wind light all day; 9th, wind light, A.M., fresh, P.M., rain after 8 P.M.; 10th, NE. storm, A.M., SE. cloudy, P.M.

MEDICAL DIARY OF THE WEEK.

Monday, Nov. 19.	{ NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Macready, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Nov. 20.	{ NEW YORK HOSPITAL, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, half-past 1 P.M.
Wednesday, Nov. 21.	{ EYE INFIRMARY, Operations, 12 M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Gouley, half-past 1 P.M. N. Y. ACADEMY OF MEDICINE, half-past 7 P.M.
Thursday, Nov. 22.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M.
Friday, Nov. 23.	{ NEW YORK HOSPITAL, Dr. Parker, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, 1½ P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Nov. 24.	{ BELLEVUE HOSP., Drs. Parker and Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. EMIGRANTS' HOSP., WARD'S ISLAND, Dr. Carnochan, 8 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

NEW YORK ACADEMY OF MEDICINE.—At the next meeting PROF. A. K. GARDNER will read an *Essay on the "Hygiene of the Sewing Machine,"* and DR. T. G. THOMAS will exhibit a new instrument for performing Craniotomy.

Original Lectures.

CLINICAL LECTURE UPON THE CÆSAREAN OPERATION.

DELIVERED AT BELLEVUE HOSPITAL, NOV. 2, 1880.

BY B. FORDYCE BARKER, M.D.

VISITING PHYSICIAN.

GENTLEMEN:—I have had no opportunity to prepare my thoughts for the occasion, having been obliged, as is always the case under such circumstances, to act entirely in the emergency; I trust therefore you will make every allowance for any desultoriness in my remarks.*

The case which I operated upon just now I will briefly relate the history of, and then call your attention for a few moments to the conditions and circumstances under which the operation of Cæsaean section should be performed, the method of performing it, and the after-treatment. I was first summoned to see the woman early this morning, and I arrived about 9 o'clock. The history, as related to me, was, that the patient, aged thirty-eight years, had been in labor two days, but that she had not informed the obstetric staff as to her condition until last evening. She was confined twelve years ago with her first child, which after four days' labor was born alive. Since that period she has been confined twice, and both of the children have been delivered, after severe labor, by craniotomy. When examined after her last labor she was told by her physicians, that on account of the condition of her pelvis she would never be able to have a living child, and she was accordingly strongly advised against becoming pregnant. However, she came to the hospital pregnant, and was last night sent to the lying-in ward, when it was found, on examination, that she was in the second stage of labor, that the membranes were ruptured, and the liquor amnii had escaped; the cervix uteri dilatable and partially dilated. Dr. Fernandez, the house physician in charge of the lying-in wards, made an examination, and discovered contraction of the pelvis; this condition was also observed by the house staff. When I arrived, on making an examination, I found the cervix dilated completely and soft; the vagina was somewhat hot and dry, and the pulse at the wrist rather quicker than normal; it had been as high as 120. On examining the pelvic cavity I found it normal in size at its outlet, the soft parts being in an admirably good condition; the presentation was the left occipito-iliac anterior. The scalp was much congested and protrusive. On examining, however, the antero-posterior diameter of the superior strait I found that it was only two inches, the cavity of the sacrum being filled with a bony tumor, which I regarded as exostosis. It apparently had its origin about an inch below the promontory of the sacrum. This point could not be decided with absolute certainty, because the child's head was pressed strongly down upon the superior strait. It was, however, not impacted there, because by using sufficient force I could push the head above the brim.

The pains were frequent and protrusive, but no effect upon the foetal head was produced. Her bowels had been evacuated very freely the night before by a full dose of castor oil. On making a careful examination of the abdomen I found it very prominent, with a considerable degree of anterior and right lateral obliquity; and listening attentively, the sounds of the foetal heart were distinctly recognised in the left iliac region two inches below, and to the left of the umbilicus. Under these circumstances, in ac-

cordance with the rules of this institution, I sent for my colleagues Drs. Taylor and Elliot, appointing 11 A.M. as the hour of consultation, and I waited for them until half-past 12 P.M.

There were only, as it seemed to me, two methods of delivering this woman; one was by craniotomy, and the other by hysterotomy. In reference to the first operation, the mere perforation and diminution of the size of the head would not have been sufficient to effect delivery, as it was impossible to get the shoulders through, without cutting the child still more. This method of delivery, *per vias naturales*, is generally and almost universally adopted by British obstetricians under these circumstances. But this operation would be attended with great danger to the mother, resulting from the shock of a long and tedious operation, and the injury which the soft parts would be almost inevitably subjected to. Statistics show that one in five of the mothers, delivered by craniotomy, are lost. The great majority are delivered under more favorable circumstances as regards the pelvic diameters, than existed in this woman. I should not regard her chance from delivery by this method as even one in two; and besides, the life of the child is inevitably sacrificed. This consideration of itself I hold to be of a great deal of importance, notwithstanding it is an established rule and settled principle that the life of the child is to be regarded as secondary to the life of the mother; so that if the other considerations made it necessary to deliver the child by viscerocraniotomy, we should have delivered in that way: it would, in fact, have been obligatory provided the safety of the mother would be secured or rendered probable by those means. The question of the life of the child was of a good deal of importance, but not the primary one upon which the decision settled. I regarded this method as involving also great danger to the mother. There remained then one other which has already been referred to—the Cæsaean section, or hysterotomy, that is, incision through the abdominal walls, the walls of the uterus, and the removal of the child and placenta through this incision.

The question was, Which was the most proper operation to be performed? For my own part, I have long had fixed rules for practice in my mind in order to be prepared to act promptly when such an occasion as this should offer. I have said that delivery by craniotomy, and extraction of the child were attended with great danger to the mother; the operation is very tedious, and inflicts a great deal of injury upon the soft parts, which often proves fatal; besides the woman is liable afterwards to severe shocks, as severe as those which result from an incision into the abdominal walls. A case occurred a few years ago of deformed pelvis from a similar cause, which was visited by nearly all the obstetric physicians in this city. I first saw her, in conjunction with Dr. Livingston, and after a careful examination, the patient being eight months pregnant, I expressed the opinion in as strong terms as I could, that the operation of hysterotomy should be performed at once. I urged the measure at that time because the woman was in a good condition, and I knew that by delay the result of the Cæsaean section would be more than problematical. There was a great diversity of opinion among other gentlemen who examined the case, when finally those in the immediate charge of the patient thought that any operation should be deferred until labor commenced. I was in due time requested to perform craniotomy, but declined, because the proposed measure was contrary to my judgment; I was present, however, at the time. I examined the patient, and would not then have consented to perform the operation of hysterotomy, for this reason; the patient, being in the hospital, had been subjected to the examination of a great many physicians, and in consequence, inflammatory adhesions had taken place, for a fibrous tumor, which had been perfectly movable three weeks before, was bound down by the formation of false membranes. She was delivered with great difficulty by craniotomy, and every part of the child was perforated before it could be removed. As the result

* A large gathering of medical students was present at the surgical clinique of Dr. James E. Wood, who announced that Dr. Barker had just performed the Cæsaean operation in the Hospital, that the child was alive and vigorous, and the mother, so far as could be judged at that early period, doing well. On account of the rarity and importance of the operation he (Dr. Wood) had been induced to request Dr. Barker to take his place for the hour.

of this she died a short time afterwards. On post-mortem examination the cervix uteri was shown to be lacerated; there was recto-vaginal fistula together with intense peritonitis extending through the whole abdominal cavity, which was filled with a large amount of broken-down secretion.

Now then, to return to this case, I felt that the operation of Cæsarean section offered a much better chance to the woman than any other means that could be adopted. The principal dangers from such an operation are, 1. death from hemorrhage; 2. by shock; and 3. by peritonitis.

If you look over the history of this operation, you will find that statistics show that in Great Britain, where the principles which govern the performance of the operation, are different from those in Continental Europe, the maternal mortality is three out of four. You have a reason for this; the British obstetricians resort to delivery *per vias naturales* by means of craniotomy or viscerotomy where such contraction of the pelvic cavity exists, and never make use of the operation of hysterotomy if by any means it can be avoided. The Continental physicians resort to the operation when there is such a contraction of the pelvis as to render the operation of delivery by craniotomy not only necessary, but dangerous; they would operate when the pelvis was contracted to the second or third degree, but the British obstetrician would not attempt it short of the fourth degree. Another reason for the mortality in this operation in Great Britain, is due to the fact, that the obstetricians there rarely attempt it until the patient is in a condition every way to bear the operation very badly. The American physicians follow neither school, and may hence be styled eclectics. If we are guided by general fixed principles, we will not hesitate to perform the operation just as soon as we have come to a decision in the matter; the earlier the better, and the greater the probability of the patient's recovery. It was with this end in view, that I determined upon taking the course that I did. I waited patiently for the hour of consultation and the arrival of my colleagues, who I expected would bear with me the weight of responsibility; but at half-past twelve, it was clear to me that duty to the patient required that I should wait no longer. The patient began to grow more and more irritable; and another reason which I considered very urgent, was this: By obstetric auscultation, you have a method of determining not only the viability of the foetus, but with considerable degree of probability, the amount of vitality which belongs to the child: if, during labor, the foetal heart beats 120 to 130 per minute, and regularly, and if in the course of two or three hours it increases very much in frequency, and is less in force, it indicates plainly to the obstetrician, that the child's life is in danger, and that delivery should be resorted to at once, provided there is nothing to jeopardize the life of the mother in adopting such a course. The foetal heart, in this case, was getting on to 140. Just at this time, one of my colleagues, Dr. McCready arrived. He not only examined the patient *per vaginam*, but marked the frequency of the foetal heart.

It was then important that the operation should be done at once. The first step was to empty the bladder by the catheter, the rectum having been previously freed by the dose of castor-oil the night before. I should remark that the patient during the morning had been kept under pretty full doses of opium, for the purpose of preventing nervous exhaustion. After the bladder was evacuated, the patient was brought under the influence of chloroform, Dr. McCready taking charge of its administration. The various members of the house-staff applied their hands to the abdominal walls, making firm compression over the uterus in order to prevent any portions of intestine from intervening. I commenced the incision to the left of the umbilicus and two and a half inches above it, passing down to the left, in order to avoid a branch of the umbilical vein, which is sometimes troublesome, as far as within two inches and a half of the pubes. The first incision was through the integuments; then with a probe-pointed bistoury I made an opening first into the peritoneum, and afterwards passing my finger into it made the section from below upwards, using

my finger as a guide. This mode of procedure is important to bear in mind, inasmuch as you thus prevent the falling of intestines. Then the incision was made downwards through the walls of the uterus, and dividing the walls in successive layers, the foetus was found lying in the uterine cavity in the position made out by the first vaginal examination. The child being removed, the next step was the extraction of the placenta. Some writers advise extraction through the vagina. I had long ago made up my mind, if ever I was called to a case of this sort, that I should not follow the rule, because the sooner perfect contraction of the walls of the uterus is secured, the greater would be the probability of saving the mother. The placenta was at once extracted through the incision. I was careful to give it three or four twists in taking it away, that I might be sure that all the membranes attached to it were removed. As soon as this was done, we made firm compression over the abdominal walls, and by contractions of the uterus, the incision, which was originally five inches in length, was reduced probably to two or three in extent. Dr. McCready at once ceased the administration of the chloroform, so that we might have the full benefit of the vital power in firmly contracting the womb. The fluid from the cavity of the abdomen was removed by means of sponges and compression. The patient was a good deal exhausted, the shock was very considerable, and the pulse at one time was from 134 to 140. We gave her also a large dose of morphine, and brandy was administered, and she was stimulated by the inhalation of ammonia. In all cases of severe shock, allow me to say, by way of parenthesis, after operations or after delivery, you must be careful in your use of stimulants not to give too much at a time, for fear you might induce vomiting, which in itself is likely to bring on prostration. By this method, we succeeded in obtaining pretty good reaction, and I am happy to say that the patient is now in as good a condition as could be expected; the child is alive and well, and weighs nine pounds and three ounces. Pressure over the abdomen is still being kept up by the assistants, in order to secure permanent uterine contraction. The wound has been closed by silver sutures, and we have allowed a small aperture about an inch in extent, to remain for the escape of the fluids from the peritoneum, but we expect the lochial discharge from the uterus to take place through the vagina. Her pulse is now 104; she has recovered her mind entirely. As for the future, we can only wait and hope; a great deal will, however, depend upon the subsequent treatment. Some of the circumstances under which she is placed, are not as favorable as I should wish them to be. I should prefer to see her in a room with a regulated temperature of 72° Fahr., kept up by a grate-fire, and that she should be free from all chances of shock or nervous exhaustion of any shape. These are very important prophylactic measures; but the one to be relied upon above all the others, consists in the use of opium to the point of semi-narcotism, selecting that particular preparation which will be best borne by the stomach. This article should be used for two reasons, 1st, As a stimulant, to restore nerve power after the severe shock; 2d, As a prophylactic against peritonitis.

When reaction is established, we shall, in the first place, apply compression over the whole abdomen by means of broad adhesive straps; this will secure firm contraction of the uterus, at the same time it will prevent exposure to cold and consequent peritonitis. Then we shall endeavor to support her well by proper nutrition and stimulants, in order to secure the reparative process as efficiently as possible.

SIR BENJAMIN BRODIE has been induced by his impaired sight to resign his position as President of the Royal Society. The Council of that Society, however, have unanimously requested him to allow himself to be again nominated with the understanding that he will not for the present be called upon to preside. To this arrangement he has consented. His disease seems to be glaucoma of one eye, and cataract of the other.

CLINICAL LECTURES ON CONSTITUTIONAL SYPHILIS.

DELIVERED IN BELLEVUE HOSPITAL.

BY

ALFRED S. LOOMIS, M.D.,

PHYSICIAN TO THE HOSPITAL.

GENTLEMEN: I ask your attention to-day to a consideration of the syphilitic affections of the *mouth, pharynx, nasal passages, and larynx*.

The mucous surfaces, especially of the mouth and throat, being intimately connected with the skin, participate in its diseases, especially when the cause of such disease depends upon a specific poison. We see this principle exemplified in rubeola, scarlatina, and small-pox. Wilson states that all the modifications of the manifestations of syphilitic virus, which are presented by the skin, are to be found on the mucous membrane of the mouth and throat. Attempts have been made to classify the affections of the mucous membranes so as to correspond to different forms of cutaneous eruption; but this is always difficult, and often impossible, if for no other reason, on account of the unfavorable disposition of the parts affected.

Most writers on syphilis establish a variety of syphilitic affections of the mouth and throat, corresponding to syphilitic exanthemata; a second variety coinciding with papular eruptions; a third, which corresponds with the squamous variety; a fourth, analogous to pustular eruptions; and a fifth, which presents the appearance of ulcerated tubercular eruptions. All of which varieties accompany the different cutaneous eruptions, and to a greater or less extent resemble them. But a practical view of the subject reduces all of these different forms of ulceration to two varieties.

1st, The *superficial*.

2d, The *sub-mucous or deep-seated*.

The superficial variety belongs to the (so-called) secondary manifestation; the deep-seated variety to the (so-called) tertiary manifestation of syphilis.

The first class, or superficial variety, never extends beyond the mucous membrane. At its commencement the membrane is simply congested, with slight tumefaction, presenting very much the appearance of ordinary aphthæ. In a few days the patches assume an opaline appearance, followed by a peculiar secretion, with inflamed margins, under which is a superficial ulceration. The surfaces of these ulcerations have sometimes a slight granular aspect, their color is deeper than the surrounding mucous membrane, and they may be situated on the tongue, the cheeks, the tonsils, the palatine arch, the velum palati, seldom behind the posterior pillar of the fauces. They are attended with no pain, except a pricking sensation during deglutition. On the tonsils and root of the tongue of this girl (Margaret Murphy), whom I presented to you at our last meeting, with a papular eruption, you find these aphthous ulcerations. On inquiry she states that she has no sore throat, showing how little inconvenience they occasion to patients. By a careful examination of all patients with syphilitic eruptions, you will find at some time during their manifestation this form of ulceration, varying from a slight erosion to a fully developed ulceration.

The second or deep-seated variety commences in the cellular tissue beneath the mucous membrane, or in the tissues still more deeply seated. It is preceded by tumefaction of the adjacent parts, destroying in its progress the mucous membrane, forming an ulcer with perpendicular everted edges, tumid border, and yellow base. If it is connected with any form of eruption it will be with the pustular, but it is apt to occur without any form of cutaneous eruption in the last stages of syphilis; periostitis and osteitis being present. This variety may attack the uvula, the tonsils, the velum palati, the tongue, but the favorite spot for its development is the posterior surface of the pharynx. At times this form of ulceration assumes a phagedenic character,

destroying rapidly all the soft tissues of the pharynx, and not unfrequently the osseous plate behind the pharynx.

You have exhibited in this cachectic middle-aged woman a well-marked ulceration of the second variety, occupying the left tonsil and a portion of the posterior surface of the pharynx. In her history, she states that three years ago she had primary, followed by "sore throat," as the first symptom of constitutional infection. Since, she has had iritis, alopecia, repeated attacks of sore throat, and now has nodes on the tibia. In examining her fauces, you notice that the ulceration extends as far back in the pharynx as one is able to see. It resembles somewhat an irritable chancre, its edges are everted with a circumference of a deep red color, its base is of a greyish-yellow color; from its appearance and the condition of the patient, I should fear the ulceration would assume a phagedenic character.

In studying syphilitic affections of the nostrils and nasal fosse, the same two varieties of ulceration which have been described as occurring in the mouth and pharynx are met with; the superficial which precedes and accompanies the eruptions, and the deep-seated which occurs later and always compromises the bones or cartilages. The first is characterized by a fungous swelling of the mucous membrane of the nose, with an alteration in the character of the secretions, the latter becoming profuse and offensive, sometimes bloody. In this girl whom I called your attention to at our last visit, with a papular eruption, and who was treated for primary at the Island Hospital, you find the pituitary membranes presenting this variety of ulceration.

In the second or deep-seated variety, the ulcerations occur within the alæ of the nose, involving the cartilages, the spongy bones, and the membrane covering them. From their situation, they are difficult of detection, often commencing in the bones themselves, attended with little or no suppuration, but with a peculiar foetid odor that leaves little doubt as to the nature of the disease. It is this form of ulceration which often results in the entire destruction of the nasal bones and cartilages, giving that disgusting deformity of a face without a nose. In speaking to you of the syphilitic affections of the larynx, I feel, Gentlemen, that I have arrived at the most obscure, and at the same time one of the most formidable varieties of constitutional infection.

Frequently some of the ulcerations which I have described to you as occurring in the mouth and pharynx extend downwards, involving the glottis and larynx, affecting the vocal apparatus, causing alterations or entire loss of voice, and at times occasioning oedema glottidis. In syphilitic affections of the larynx, I doubt if one can retain distinctly the two varieties of ulceration which have been described as occurring in the buccal cavity; they only occur long after the primitive accident, and the ulcerations are always sub-mucous in their character. They produce all the symptoms attending diseases of the larynx, but their true character is readily appreciated, for they never seem as a solitary symptom of constitutional syphilis. The symptoms attending them often closely resemble those of tubercular laryngitis, but a careful physical examination of the chest will set us right in this particular, and with a perfect history of our patient we can scarcely confound the two diseases. These ulcerations may have their seat upon the epiglottis, the arytenoid cartilages, the chordæ vocales, and even extend into the trachea. Dr. John Watson of this city has reported a case where the autopsy revealed an ulcer in one of the bronchial tubes of a syphilitic character. But, that you may realize more fully the danger that sometimes attends these laryngeal ulcerations, I will present to you the histories of the two patients before you, who, you see, are breathing through tubes introduced into the trachea through the crico-thyroid membrane. By them I shall be able to elucidate the main features of this affection.

The history of this patient, Hannah McN., has been carefully prepared by Dr. JOHN HOWE Jr., House Physician.

She is 30 years old, a widow, native of Ireland, admitted July 3, 1860, intemperate, is the mother of two children, the youngest being seven years old. A short time subsequent to the birth of her last child she contracted primary syphilis from her husband, which was entirely neglected, and which became constitutional. The various phenomena of the secondary and tertiary forms rapidly developed themselves, some of them making repeated appearances. Seven weeks previous to this present admission she came to the Hospital with her fifth recurrence of sore throat, but left before she was entirely relieved. The present attack was excited by exposure to cold and moisture while washing clothes, and came on about four weeks after her discharge from the Hospital.

On her present admission to the office of the Hospital at 4 P.M., July 3, she was seen by one of the House Surgeons and pronounced moribund, and ordered to be transferred immediately to one of the wards. When called to see her five minutes afterwards, I found her sitting erect in bed suffering intense dyspnoea, and grasping at her throat with her hands in her attempts at inspiration. Her countenance bore a fearfully anxious expression, her lips were blue, her face livid and distressed, her extremities cold, her skin was of a cold clammy feel, and bathed in a profuse perspiration. The respiration was sixty to the minute, and almost entirely cervical, the inspiration being accomplished with the greatest efforts, about half filling the lungs, and being accompanied by the peculiar "dry-piston" sound of laryngeal obstruction.

On making a digital examination of the throat, and passing my finger down behind the epiglottis, I had my apprehensions of oedema glottidis confirmed, by feeling the tumid portions of the rimæ glottidis, which were so much swollen and approached each other so nearly as almost entirely to obstruct the passage of air. Her pulse was 120 and feeble, and she tossed about gasping that she was choking. Before proceeding to extreme measures, the heater was applied to aid in bringing reaction. A sinapism was placed upon the throat and the fauces, and the larynx was probanged with a 60 gr. sol. of nitrate of silver. Brandy and carbonate of ammonia were administered freely. Scarifications were not attempted. At 5 P.M. called the House staff together and proposed to operate for laryngotomy, the necessity for which was instantly conceded. A slight amelioration in the symptoms presently taking place, the operation was postponed, an assistant being directed to sit at the patient's bedside and report immediately any exacerbation, and a messenger sent for Dr. Loomis. At 7 P.M. I was summoned to the patient, who was truly in the greatest extremity, her pulse was 140, and felt with difficulty. Having nothing to hope from the means already employed, and feeling that further delay was criminal, Dr. Loomis not having arrived, I proceeded to operate in the usual manner for laryngotomy. On the introduction of the tracheotomy tube, the relief was instantaneous. A few clots and a quantity of mucus were ejected through the tube, and in half an hour after the respiration became deep, regular, and 35 per minute. The lips lost their lividity, and the face assumed its natural expression. The pulse was still 140, and weak brandy and beef-tea were administered *ad libitum*.

At 9 P.M. the pulse was 120 and fuller, the extremities warmer, and the respiration 30 per minute. At 11 P.M. she had optical illusions, which seemed to portend delirium. The respiration was 25, pulse 114, and the patient showed a disposition to sleep. At midnight she fell asleep, and slept till 4 A.M. of the 4th. At 6 A.M. the respiration was 20 and regular, skin moist and cool, pulse 100, and she was ordered a full diet of eggs, milk, beef-tea, &c., for the day. From this time she improved rapidly. The inner tube was removed and cleaned every three hours. On July 8, she was able to get out of bed; her pulse was about normal, and her respiration established at 18. Another examination of the throat showed the oedema to have entirely disappeared. The epiglottis could be distinctly felt, ulcerated and indurated, and the rimæ glottidis roughened. Treatment

was now directed to the syphilitic disease. The constitution was built up by cod-liver oil, quinine, and iron, generous diet and wine. Topical applications of iodine were made to the larynx, and anti-syphilitic remedies addressed to the general system. She has been daily improving. To-day there is upon the superior border of the epiglottis a white line of erosion; her voice, as you notice, is still husky, pressure on the larynx gives pain, she becomes livid and suffers from extreme dyspnoea, when the tube is entirely closed, even for a moment; expectoration through the tube is very copious and of a muco-purulent character. By digital examination the epiglottis is felt to be contracted and thickened, the posterior pillar of the fauces feels like an old cicatrix. We will continue for the present the treatment detailed above. The history of this other patient before you has been prepared by Dr. Alex. Hadden, House Physician.

Anna S., aged 27, intemperate, native of Ireland, was admitted July 18, at 4 P.M., suffering from extreme dyspnoea. Had primary syphilis seven years ago, followed within a year by constitutional symptoms; one year ago had an eruption on her skin, four months since had ulceration of tonsils and pharynx; three weeks before admission began to have difficulty in breathing, which has daily increased. Examination on admission: no tuberculous deposit detected in either lung; fauces not inflamed; mucous membrane of epiglottis (which could be plainly seen) thickened and congested, the vessels appearing very distinct; inspiration very difficult, expiration quite free; hands cold and livid in appearance; pulse 110 and feeble; pressure over the larynx gives patient intense pain, voice husky, cannot articulate distinctly enough to be well understood. Topical applications of nitrate of silver, xl. gr. to ʒi., vapor inhalations, belladonna plaster, and hot air baths affording but temporary relief, and her dyspnoea at 12 M. becoming imminent, and her condition one of almost complete asphyxia, laryngotomy was resorted to. Immediately on the introduction of the tracheotomy tube relief was obtained, and in a short time she slept quietly, not having been able to do so for weeks. Tuesday, July 20, her respiration is 20 per minute and regular, her pulse 80 and full, and her face has resumed its natural expression. When the finger is placed over the mouth of the canula, immediately her countenance assumes an anxious expression, her lips become livid, and by her ineffectual attempts at inspiration, she shows plainly that the larynx is not permeable to air. Aphonia is complete. She is ordered beef-tea, milk, eggs, etc. Topical applications of iodine are made to the larynx, and anti-syphilitic remedies are addressed to the general system in the form of mercurial baths and iod. pot. These two patients present to you the principal features of syphilitic ulceration of the larynx. Not that we are always to resort to the extreme measures which we have been compelled to adopt in these cases to prolong the lives of our patients, but in all patients affected with this form of disease, you will have to a greater or less extent the prominent symptoms manifested by them. Its mildest form may be characterized by simple hoarseness, or ordinary catarrhal symptoms; but if the venereal poison is fully developed in the system, you will have permanent thickening of the mucous membrane, or ulcerations of the deep-seated variety involving at times the cartilages, producing fever with night-sweats, and all the train of symptoms of laryngeal phthisis.

I have not spoken thus far of the treatment to be adopted in the different forms of ulceration, which we have been considering, nor shall I to-day detain you with the details of their treatment. When I shall have described some of the other manifestations of constitutional infection, I will enter fully into a consideration of the treatment of all the varieties of constitutional syphilis. The constitutional is that applicable to all forms of consecutive syphilis. The local consists in the topical application of caustics, tincture of iodine, acids, the vapor of mercury and iodine, astringent gargles, and in certain forms of ulceration of the larynx, the operation of laryngotomy.

Original Communications.

FUMIGATION OF THE LUNGS AND AIR-PASSAGES.

ABSTRACT OF A PAPER READ BEFORE THE ACADEMY OF MEDICINE, FEB. 1, 1880.

By CHARLES MATHEWS, A.M.,

PROF. OF CHEMISTRY.

No principle of medical science is more simple and obvious than this, that in local diseases, as a general rule, the local application of remedial agents, although not always to be depended upon alone, offers the best prospect of relief, or of cure, as the case may admit of one or the other. The practice of the profession, and the popular modes of treatment outside of it, are equally consistent with this plain and common-sense idea, and the success which usually attends its judicious application attests its truth and importance.

In complaints of the lungs, trachea, larynx, nares, and adjacent parts, this mode of treatment is attended with very embarrassing difficulties. The most important of these organs, either from their interior situation or their extreme sensibility, are not readily reached and acted upon either by solids or liquids; and the attempts which are daily made by some modern practitioners, by means of mechanical devices, to operate directly upon such parts, while undoubtedly they meet with a certain degree of success in many cases, in others are either wholly impracticable or unsuccessful; while in all cases they are attended with such distress and suffering as to repel the timid and nervous patient; to say nothing of the dangers attending them which some recent events have demonstrated: so that the confidence both of the profession and of the public in the mode of practice alluded to is decidedly limited. Under such embarrassments, it is easy to understand why the cautious and scrupulous physician, for the most part, when consulted in a serious and advanced case of disease of any of the parts just mentioned, is slow to give encouragement of a radical cure; and why, relying mainly upon constitutional treatment, with hygienic and dietetic directions seldom possible to be observed, he so often fails to remove the malady, or materially to relieve the patient, that this whole class of diseases is proverbially considered as *scandalum medicorum*—a reproach to the healing art.

Nor is this a cause for wonder. Not to enlarge upon the impracticability, in nine cases out of ten, of following out, however important, the precepts laid down in reference to diet, regimen, habits, occupation, etc., let us look at the matter of constitutional treatment.

Take, for example, a very common affair, an ulceration of the larynx. Now, if we estimate the amount of blood passing through the small vessels of this delicate organ at $\frac{1}{10}$ th part of that which makes up the whole mass of the circulating fluid, it is evident that, given the amount necessary to produce a given effect upon the larynx, a thousand times as much of the medicinal agent employed must be administered, and diffused throughout the whole circulation, even supposing no change made in its properties (a supposition, however, at open war with all the facts), by the chemical or vital action of the many solids with which it comes in contact, and of the various fluids through which it is diffused in its long and circuitous journey from the mouth to the part in question. What mischief and misery it may produce or aggravate on its way, in the stomach, intestines, liver, lungs, or heart, before reaching the larynx, or deposited from the blood in more retired parts of the system, is too well known to require more than a passing allusion. This state of things would be sufficiently discouraging, were no other resource left. Fortunately there is; but for centuries the profession has made unsuccessful efforts to put it in practice in an available

manner. We mean the inhalation of medicinal substances in a gaseous or aeriform state. This method of treatment has for a long time, at intervals, enjoyed no small popularity, both within and without the profession, but has not hitherto given such clear and decided results as to secure the degree of confidence which we believe its merits to deserve; and we propose to show that the limited success so far attending it has arisen from the imperfect plans and defective apparatus heretofore used, and not from a fault of the principle involved.

We remark, then, in the first place, that the apparatus employed is commonly both expensive and cumbersome; often requiring the aid of a nurse, or professional assistant; not seldom, when in use, annoying to the family, as well as distressing to the patient, and requiring the devotion of so much time to its proper use as seriously to interfere with his occupation, when well enough to give some attention to business. The result of all these drawbacks is, that it is rarely used at all as a prophylactic, or in ailments whose mild type admits of a good hope of cure; and when resorted to in a case of danger, is seldom effectually persevered in; the simple draught or pill, which offers some slight prospect of relief, being so much more convenient.

As to the various modes of application hitherto used, take first the moist method, by means of tinctures and infusions, whether cold or warm, with the ordinary inhaler. Now, it is evident that the medicinal agent will not pass into a state of vapor at all at a temperature which the patient can endure, unless it is very volatile, at a heat but little above that of the human body. But, if thus volatile, it is also plain that it will pass over at first too strong, producing irritation and distress; but soon, its strength being exhausted, it will become inert and useless; the whole operation being thus irregular and uncertain.

Take next the fumigations with substances less soluble, as mercurials, resins, etc., by throwing them on a heated metallic plate. Here the same objection occurs, viz. first, an excess of powerful and irritating vapors, to suffocate and distress the patient and annoy the household, and presently an entire want of vapor; the whole ending in little or no progress in the cure of the disease.

Again, if the attempt be made to smoke stramonium, or other powerful narcotic herbs, in an ordinary pipe, it will be found that the bulk of coarse vegetable matter necessary to keep up the combustion will generate an amount of smoke and empyreumatic vapor which will irritate and even excoriate the mouth, and cannot be safely and comfortably inhaled.

Finally, the plan of projecting, blowing, or inhaling into the lungs dry powders, whether vegetable or mineral, though it has a show of plausibility in theory, in practice will be found difficult and inconvenient.

Are we, then, driven to the distressing and hazardous expedient of the bent stick of whalebone, with the sponge attached? By no means; for we propose now to explain a more excellent way, whereby the fumes and vapors of a great variety of remedial agents may be introduced with the breath into the air-passages, and carried even into the cells of the lungs, in a diluted, attenuated, and nicely graduated form, thereby securing their slow, mild, and continuous action upon the diseased membrane, or made, if desired, to act upon the fluids, by bringing them in this most direct manner into contact, as it were, with the blood, or lastly to affect the nervous system, and that without distress or inconvenience to the patient or others.

The apparatus by which we claim to accomplish all this is a new and peculiar invention, which we have named the Multiform Fumigator, and is constructed as follows:

First, we form a slender tube of thin paper, of suitable length, in one end of which is fixed a short and stiff tube of the same material, to serve as a handle and mouth-piece.

Secondly, is constructed another tube, of delicate tissue paper, closed at the bottom, to hold the powder to be smoked, and fitting into the first tube in such a way, that

there will remain just space enough between the two for the passage of the smoke. The inner tube being then filled with the powder, and twisted to a point, the compound tube is ready to be lighted and smoked in the manner of a cigar. For the convenience of a patient sitting up in bed, a light, sliding pan, spoon-like in form, is attached to the tube, to catch and hold the ashes.

The proper construction and filling of the tube is a matter of much nicety, which we omit, and pass to the consideration of the substances with which it is to be filled.

The first desideratum is a proper combustible powder, inert itself, or nearly so, which may serve as a fuel, by burning which the medicinal agents mixed with it, either singly, or combined to suit the case in hand, are sublimed, or made volatile. Many vegetable substances answer this purpose very well, as decayed wood, pine bark, etc.; but the powder of cubebs is, on the whole, preferable in all cases where a gentle stimulus is admissible. The mild and agreeable volatile oil contained in this well known drug is itself highly efficacious in many cases requiring a gentle stimulation of the mucous membrane, and can very seldom be objectionable.

The tube, when filled and lighted, will burn slowly for a long time, and the vapors and fumes can, with a little prac-

tice, be cautiously inhaled without inconvenience or irritation, when the larynx, trachea, or lungs themselves are the seat of disease; expelled through the nostrils, in the treatment of their many troublesome and obstinate ailments; retained in the mouth for toothache, neuralgia, etc.; or, finally, for deafness, or other complaints of the inner ear, forced into the Eustachian tube.

As to the diseases of various classes, including organic, nervous, and humoral, to which the treatment is applicable, it would be out of place here to attempt a catalogue or a classification; their name is legion; their forms Protean; their type the venomous and deadly Hydra. To all such complaints the various well-known remedies can be applied in this manner, with a strength accurately graduated to suit the given case; whether powerful and active, for the relief of distressing and violent attacks, as of racking cough or spasmodic asthma, or milder, for quickening the circulation, or eliminating viscid and unhealthy secretions of the mucous membrane, or as a prophylactic in incipient or suspected disease.

Besides local and fixed organic affections, nervous ailments also, either of the system at large or of particular parts, and impurities of the blood, especially scrofulous, tubercular, and syphilitic, are amenable to this treatment.

As to the latter class, namely, those arising from impurities of the blood, the researches of modern physiology, and their bearing upon the origin of miasmatic, endemic, and epidemic diseases, all tend to one conclusion, that as disease and death are inhaled and fixed upon the system with the air which we breathe, by its action upon the blood in the lungs, so health may be preserved or restored, and life prolonged, by the wise use of remedies in the method here proposed.

A few words as to the various classes of remedies, for the cure of which the Fumigator is adapted, will conclude this article—premising that we claim, by means of its peculiar arrangement, to have furnished for the first time to the world an apparatus whereby it is possible to smoke a substance in an *impalpable powder*, and inhale its vapors. The advantage thence accruing, in the accurate combination of powerful and insoluble substances, both vegetable

and mineral, in minute proportion, with more inert materials, is very evident.

1. Opiates and narcotics; as opium, stramonium, conium, belladonna, digitalis, cannabis, lupulin, veratrum, aconite, and many others.

2. Balsams and resins; as tolu, benzoin, copaiva, assa-fetida, ammoniac, camphor, tar, and other substances yielding creasotic and naphthous products.

3. Aromatics and stimulants; as aromatic herbs, cubebs, anise, *et id genus omne*; cloves, capsicum, mustard, musk, astoreum, etc.; the powerful in minute proportion.

4. Metals; as mercury in its combination with oxygen, chlorine, iodine, and bromine; also arsenic and antimony.

5. Other agents, rather miscellaneous; as valerian, lobelia, arum, ipecac, iodine with starch, acetic acid and acetone, liberated by heat from acetate of lead, and many others, of various kinds, as the practitioner may prefer.

As to the great question of the practical results of the above mode of treatment, they have been so far decidedly favorable; and the invention is offered to the profession as the fruit of much labor and study, with much confidence in its value and importance.

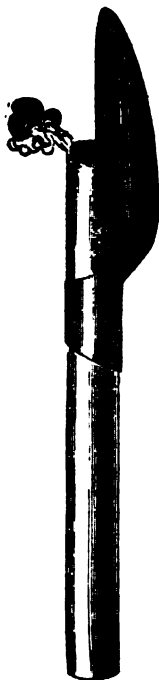
Reports of Hospitals.

BELLEVUE HOSPITAL.

TYPHOID FEVER COMPLICATED WITH PHLEBITIS.

[Reported by WM. C. FERGUSON, M.D., House Physician.]

WINIFRED B., æt. 20, domestic, was admitted to the Hospital, Sept. 21. For nearly a week previous, she had been suffering from the symptoms of incipient typhoid fever but had not, until a day or two before admission, been confined to her bed. When examined, after her entrance, she was found with the following symptoms:—skin dry and hot; cheeks flushed; tongue slightly moist and coated, but intensely reddened along its borders; pulse 108 and strong; conjunctiva bloodless; inclined to be drowsy. The patient was shortly after seen by Dr. Elliott, the attending physician, who confirmed the diagnosis of typhoid fever which had previously been made. A febrifuge composed of sweet spirits of nitre and spirits of Mindererus was prescribed, together with beef tea; and directions were also given to have the body sponged with tepid water. There was no material change in her condition until the 23d, when symptoms of bronchitis began to declare themselves; the tongue became more thickly coated, and the pulse ranged from 110 to 112. Stimulants were given freely, but in the course of the following three or four days the bronchial inflammation extending over the whole chest, it was found necessary to apply dry cups and administer an expectorant composed of the following ingredients: Carb. ammoniac, ℥ij; tr. sanguinariae, syr. bals. tolu, aa ʒi.; aquæ ʒii.; the dose of which was a tablespoonful every two hours. The abdomen became tympanitic, and the patient complained of pain on pressure in the right iliac region, in which situation a vesicating plaster was applied, followed by a poultice five hours afterwards. Sept. 27.—Pulse 124; blister raised well; tympanitis not increased; pain in iliac region subsided almost entirely; bronchitis still exists, and expectoration quite free and abundant. Turpentine stupes were directed to be applied to the chest. Diarrhoea being present, five grains of ext. catechu were given every two hours. Sept. 28.—Diarrhoea checked; bronchitis diminishing; pulse 130, and weaker; stimulus increased and carb. ammonia added. Sept. 30.—Pulse 130 and compressible; tongue dry and sordes upon the teeth. General treatment



continued. Oct. 2.—Pulse 132; tongue dry; bowels moved three times during the night; ext. catechu given as before with the same result. Oct. 3.—Pulse 120; lies in a semi-comatose condition; during the night passed the urine involuntarily; in addition to the beef-tea and stimulants, iron and quinine were prescribed; bronchitis still continues. Oct. 4.—Involuntary evacuations of urine have ceased, but patient is otherwise about the same. Oct. 6.—No change since last note; but pulse now becoming more excited it is deemed best to reduce the quantity of stimulus. Oct. 14.—Patient commencing to convalesce; complains of pain in left leg, which is swollen and cedematous, and which, on examination by Dr. McCready, was pronounced to be phlebitis. The following liniment ordered: Tinct. iodine, 3 ss.; lin. saponis comp. 3 iiii. The patient is too feeble to allow the application of leeches. Oct. 17.—Edema and tenderness of the limb very much diminished; iron and quinine continued with beef-tea and stimulants. Oct. 29.—Has been steadily improving, and is now able to be up for the greater part of the day, the symptoms of phlebitis having entirely subsided.

Clinical Record.

UNIVERSITY MEDICAL COLLEGE.

PROF. VAN BUREN'S CLINIC.

November 3, 1880.

HYDROCELE. STRICTURE OF URETHRA. FRACTURE OF RADIUS; SHRADY'S SPLINT.

CASE V.—*Hydrocele*.—A. K. set. 67, cooper by occupation, has had hydrocele for the last twelve years. The usual symptoms of this affection, as marked in this case, are: a pyriform tumor that has been growing for several months, uniform in hardness, with a tendency to constriction around its centre. The most reliable test for hydrocele is that by translucency, but this cannot always be obtained in consequence of a thickening of the tunica vaginalis by an inflammation of its substance. Hydrocele may be dependent upon a disease of the testicle itself, and most commonly such disease has its origin in syphilis. It is very important that you make out the existence of such a state of things before attempting the rejection of the one, otherwise harm might be occasioned. The testicle is found to be healthy, and accordingly I advise that the sac be injected with some stimulating fluid, in order to excite a sufficient amount of inflammation to alter the tendency to secretion. The radical cure of this disease is best effected by means of the injection of the compound tincture of iodine, which is much to be preferred to any other preparation used for the purpose. The fluid which is drawn off is always albuminous in character, as can be proved by the addition of a small quantity of nitric acid. I use the tincture generally diluted with two-thirds to one-half water; but I have injected the tincture of iodine into the sac pure, without any bad result. The degree of inflammation following the compound tincture of iodine is somewhat uncertain, and bears no relation to the amount of pain which it causes at the time. When the pain of injection is greatest, and it is sometimes severe, the consequent inflammation is often trifling. When the pain is severe I advise the patient to keep his bed, otherwise to walk about. The hydrocele was injected, and the patient complained of little or no pain.

CASE II. (See page 331) returned.—*Stricture of Urethra* under treatment by dilatation.—A number 7 bougie can easily be passed to-day. It would be proper, even after a full-sized instrument can be passed, to continue its use for an indefinite period, in order to perfect the cure.

CASE VI. *Fracture of Lower End of Radius, treated by Shradys Splint*.—This patient is one of two cases of recent silver-fork fracture, who applied for relief at our last Clin-

ic, illustrating the fact, that this is the fracture of most frequent occurrence in practice. Preference was then expressed for short splints in the treatment of this injury, as less likely to be followed by stiffness of the wrist-joint. In one of the patients the short splints were used, and in the other the limb was placed upon the splint invented by Dr. George F. Shradys, late house-surgeon of the N. Y. Hospital, for this variety of fracture, and which I have employed with good result in that institution. When placed upon this splint, the hand, as you see, is both flexed and adducted—the most advantageous position in which it could be placed in this fracture to retain the fragments in apposition. This splint is a modification of Dupuytren's; his idea was to adduct the head in order to obviate the tendency to deformity, in bad cases, in the opposite direction. Dr. Shradys adds to this the flexed position of the hand, which has a positive influence in obviating the tendency to the silver fork deformity. Dr. Gouley tells me this splint has been used with advantage in Bellevue Hospital. It is an improvement, and in bad cases is well calculated to prevent deformity, which is always a difficult task; but in less severe cases, it has the disadvantage of confining the wrist-joint more than the short splints, rendering the early employment of passive motion necessary.

JOURNALS FOR NOVEMBER.

ST. JOSEPH MEDICAL AND SURGICAL JOURNAL.—NOV.

ART. I.—*Quinine and Prussiate of Iron in the Treatment of Dysmenorrhœa*. By DR. J. B. SNELSON.—Dysmenorrhœa is not always dependent upon engorgement, displacement, or stricture of the canal of the cervix; it is sometimes purely neuralgic, or according to the author's observation, more frequently of a rheumatic character, in the treatment of which his plan is to clear out the alimentary canal with proper purgatives, and to relieve the sufferings of the patient during the menstrual period, with the warm bath, and some preparation of opium in combination with camphor and ipecac; and during the intermenstrual period one of the following pills morning, noon, and night. β Sulph. Quinine, Ferri Ferrocyanureti aa gr. xl, divide into xx. pills. He has pursued this plan of treatment for several years with results entirely satisfactory, and considers it equally well adapted, whether the disease be of a neuralgic or rheumatic nature. ART. II.—*Remarks on the Effect of Diseased and Neglected Teeth upon Health, and their influence over, and complication with disease, in many varied forms*. ART. III.—*Extracts from a Note Book*. By DR. G. C. CATLETT.

RAPE COMMITTED DURING MAGNETIC SLEEP.—A case of this is recorded in *La Presse Médicale de Marseille*. A girl, 18 years of age, believing herself to be sick, consulted a man who professed to cure diseases by animal magnetism. For some time she went to him daily. After about four months and a half she perceived that she was pregnant, and complained to the police authorities, who consulted Doctors Costa, Director of the School of Medicine, and Broquier, principal Surgeon, to give an opinion: 1st. Whether the girl was pregnant, and the period of utero-gestation, and, 2d. Whether she could be violated and made a mother against her will. These physicians ascertained that the girl was pregnant, and that utero-gestation had not advanced further than four or four and a half months, and, supported by the report made to the Academy of Medicine by M. Husson, in 1831, concluded since it is demonstrated that a subject under the influence of magnetic sleep is insensible to all tortures, it seems rational to believe that a young girl may submit to coition without voluntary participation in the act, without being conscious of it, and of course without being able to resist.—*Gazette Médicale de Paris*.

American Medical Times.

SATURDAY, NOVEMBER 24, 1860.

MEDICAL RELIEF IN CITY AND COUNTRY.

In the last number of the *Times* we had occasion to mention some of the excellences of the system of voluntary Medical Relief by means of public dispensaries in this city. We will now resume this subject for the purpose of making some suggestions for the greater usefulness of such modes of administering medical charity, and for the extension of a similar system of public charity and sanitary protection to the suburban and rural districts wherever the sick poor are not fully provided with proper medical attendance.

For the immediate improvement of our city dispensary system, we would recommend—*First*, That the several dispensary districts of the visiting, or outdoor physicians of the dispensaries, be diminished at least one-third. And as the territory occupied by each dispensary is too extensive, furnishing too large and a constantly increasing number of patients, and also being of so great extent as to require too long journeys from the extremes of the various districts; and as two additional dispensaries are already required in the northern sections of the city; it is highly desirable that either a modification and diminution of some of the present dispensary districts be made in connexion with the organization of the two proposed up-town dispensaries; or that one or two new institutions be organized as branches of the Eastern and the New York Dispensaries. *Secondly*, We would recommend that each attending physician at our dispensaries should have a junior assistant, or assistants, by whose aid he should invariably insure *punctual and constant attendance*, and the prompt dispatch of business at the appointed hours. This is desirable both for patient and physician, for many of the medical gentlemen whom the Managers would desire longer to retain, are compelled to retire from dispensary service, or to be somewhat irregular or hurried in their attendance to dispensary duties. But in regard to a permanent and radical improvement of our city dispensary system with reference to its becoming an agency for effectual sanitary supervision and inspection, there should be a modification that cannot be effected without the aid of the municipal or State Government. The Dispensary Physicians should constitute a leading department of the Sanitary Police of the city, and they should be endowed with the civil authority and official responsibility requisite for the highest efficiency of such public service. We are happy to know that these views are shared largely by the Managers and Physicians of our Dispensaries, and by the Association for Improving the Condition of the Poor.

Our next proposition for increasing the public utility of our dispensary system relates to the treatment of venereal diseases. Hitherto the dispensaries have been unable to adopt a plan satisfactory to themselves on this subject, and no system has yet been adopted that can properly meet the exigencies of the vicious poor, and secure the protection of the public and physical interests which are involved in the questions here at issue. We are happy to know that these

questions have for some time past been under discussion by the Board of Trustees of the old City Dispensary, and that with but a single dissenting vote that intelligent and excellent Board have decided that no poor patient shall be excluded from the benefits of that institution, whatever the malady. Though the debates and the differences upon this question were protracted and earnest, all doubts as to the propriety, necessity, and duty of the dispensary to treat venereal diseases finally yielded, as the physicians pointed to the innocent wives of vicious husbands, the scathed and helpless infants of such parents, the frail and brutal denizens of the low tenement houses, and the children that, while yet scarcely in their teens, are brought to that institution for the cure of chancres, gonorrhoea, and the horrible invasions of constitutional syphilis.

It is true that the venerable President of that Board of Trustees could not conscientiously assent to the new proposition (and in this he represents a much respected class of moralists who are not deficient in philanthropy), but did he know that the servants in his own or his neighbor's mansion are, not unfrequently, the victims of syphilitic disease, and that the same bone-rotting pest is always liable to be communicated to the innocent infants and other members of such homes of unsuspecting purity, that conscientious and noble purpose to do *right* and not to set a premium on vice, would surely and earnestly be arrayed in favor of the action taken by the Trustees of this dispensary.

The other dispensaries in this city have not taken any decided action upon this subject, except to exclude venereal diseases as far as practicable. A morbid and erroneous moral sentiment among the benevolent has prevented the necessary agitation and proper settlement of the question. But there is an increasing interest in relation to it, and the time has arrived when by some civil authority, or by some mode of administering medical charity, the ignorant and the vicious poor must be differently provided for in this great city, or else untold and irremediable evils from this scourge of the *passion dominant* will fix their blighting stains upon constantly increasing numbers in all ranks of society.

As our several dispensaries have for years past endeavored to act in perfect unison, and as they now have a joint committee made up of the respective Boards of Managers, and known as the Committee of Conference, it seems desirable that this Committee should, without unnecessary delay, take up the consideration of this subject as decided by the old dispensary, and, if possible, agree to adopt some proper plan for insuring the immediate treatment of the victims of sexual disease. And, if practicable, such a plan should be adopted as will be acceptable to those who would strive to avoid putting a premium upon this vice by making the remedy of its natural penalty too cheap.

Such are some of the considerations that impressed us upon perusing the Circular of the Sanitary Association's Dispensary Committee; and with a few suggestions respecting the organization of Dispensaries out of the city, or a general system of voluntary Medical Relief in villages and rural districts, we will close these remarks.

In the cities of New York, London, and Paris, it is estimated that fully one-half of all the sick under medical treatment, are provided for by means of the dispensary and hos-

pital systems. In London, it is found that the average of such annual beneficiaries constitute about one-fifth of the entire population; and in New York about one-sixth. Now although the average ratio of sickness in a village or rural population is usually considerably less than in cities, and the proportion of the *destitute* sick still less, there are, nevertheless, many families and many sick persons in every suburban and rural population, that in consequence of the utter absence of any *organized plan* for providing and insuring proper and skilful medical care of such patients, are suffered not only to become the victims of charlatanry, but, too frequently, they become the sources and radii of infectious maladies which are spread throughout the community.

In Great Britain and Ireland, and most European countries it has been found necessary to institute national systems of medical relief; and this has generally been effected in connexion with the administration of the poor-laws of those countries. But the systems for medical relief in villages and the rural districts of Europe are far from being perfect, though they are under the direction and patronage of the civil government. In Belgium, which probably has the best system of general relief for the poor, all the sick poor are entitled to a physician's attendance and to medicine; and in every parish a physician and an apothecary are appointed for service under the direction of the *maîtres des pauvres*—the latter an honorary and much respected office, while the former are salaried appointments. The parishes have an average population of about four thousand. The parish physician is elected by the local medical commission, which is itself elected by the resident practitioners. All these appointments are filled by men of acknowledged eminence and excellence, and they have charge of various matters affecting the public health.

After an examination of other systems, and the history of efforts and plans for the administration of medical relief throughout our country, we are of the opinion that in all our suburban and rural districts a system modelled mainly after the Belgian might be advantageously adopted. Until State legislation shall provide a general sanitary code, such a system would need to be purely voluntary; but it would be found that our county and town Medical Societies would furnish the necessary primary organizations from which the authorized appointments should emanate; and we are warranted in believing that the civil authorities of the towns and counties would cordially unite in sustaining and giving efficiency to such a plan, under existing laws.

We venture to throw out these suggestions without any attempt at elaboration, believing that the time has come when such a work should be undertaken by medical men and philanthropic citizens in every hamlet, and in every populous rural district. The practical importance of such a proposition, if it can be successfully carried into effect, would be very great; and the various benefits which would result to the community at large might be as certain and as great under a voluntary as under State organization.

THE ACADEMY OF MEDICINE.

In the pursuit of scientific knowledge, and particularly in the cultivation and improvement of an art that requires extended acquaintance and varied applications of such knowledge, voluntary association for purposes of discussion and suggestion is an acknowledged and essential means of

scientific progress and professional improvement. In no other profession is this so manifest as in ours; for medicine is pre-eminently a science of observation, experience, and universal knowledge. The busiest practitioners, with their varied experience, the most scientific observers, and the ablest philosophers of our profession, have mutual and equal interests to promote by means of friendly association. They may and they should mutually help each other in their pursuit of practical and scientific knowledge.

The *Académie de Médecine* of Paris, the Royal Medico-Chirurgical Society of London, and the New York Academy of Medicine, furnish examples of a noble purpose, thus to serve the common cause of science and humanity; and whatever may have been the measure of success which either of these great associations has achieved, we know the objects of their projectors and friends have been worthy the character and spirit of the science and the art we cultivate. Mark the declaration of the objects and the aims of the New York Academy of Medicine:—

"The objects of the Academy shall be:—

"*First.* The cultivation of the science of medicine.

"*Second.* The advancement of the character and honor of the profession.

"*Third.* The elevation of the standard of medical education.

"*Fourth.* The promotion of the public health."

These are the objects, and they are the only objects of our Academy; and not in this city only, but throughout our country the question may justly be asked, by every cultivator of medical science, and by every friend of the profession, is the New York Academy of Medicine accomplishing the great objects that are thus set forth in its constitution? That they may and should be accomplished each of its three hundred members would proudly affirm. But is all being accomplished that can and that should be done for fulfilling those objects? Let every member ask himself this question, and see to it, that no other and unworthy purposes enter into his actions, interests, and influence, as a member of that important association.

These reflections are naturally forced upon our mind as we approach another epoch in this second and hopeful era of the Academy's history. Under the new constitution the officers are elected biennially, and by this means as well as by the wise provision made in the new constitution for the transfer of all secular and irrelevant business to the council, the high aim of the membership may be kept clear of objects unworthy the Academy's attention when in scientific session.

Notwithstanding the advantages that have or at least that should have accrued to the Academy in consequence of the institution of the "sections," and under the new constitution of the council—all of which were *designed* to facilitate the attainment of the grand objects of the association—those well designed improvements have not yet relieved the Academy's regular sessions from tedious details of business, and of those yet more tedious and useless colloquial and rhetorical platitudes that are never allowable in a dignified scientific body.

Had not the spirited discussions upon puerperal fever, and the rich scientific contributions of an Isaac and a Dalton proved that profitable hours may be spent in the stifling atmosphere of the Academy's unventilated hall, we might charitably believe fresh air and a better apartment to be the

only conditions required to insure, not only an abiding and lively interest in the meetings, but also to enable the speakers to deliver their thoughts in such manner as to attract the masses of our brethren to each session. We need not enlarge upon this suggestion. The Council can provide a well ventilated and suitable hall for the meetings; the members should see to it, that the time of the Academy be not needlessly engrossed by business that can properly be committed to the council; and a similar remark may be made respecting the duty of the several scientific sections of the Academy: they should faithfully prepare their stated reports and suggest the most suitable questions for discussion before the Academy on subjects under their special advice and direction. Though it is a popular and voluntary association, the Academy should, in its proceedings, not only adhere to the strictest parliamentary rules of order in debate, but should be characterized by an earnest and harmonious pursuit of scientific and practical truths in medicine.

The County Medical Society was specially organized to look after the ethical and more external relations of the profession in this city. The laws of the State not only authorize, but require this; and these are duties which that society cannot innocently neglect. But the Academy was created for purposes more exalted and attractive. It is at least, or should be, a *strictly scientific association*, and for the sake of improvement in medical science, as well as for the honor of our profession, the Academy should never descend to the arena of petty and personal strife.

We have alluded to the County Medical Society as the legally constituted tribunal for adjudicating questions in ethics; and if we must have medical politics and controversy in the profession, we say let that society be the chosen seat of war: but the Academy should be regarded as sacredly consecrated to SCIENCE. The general plan of the Academy is happily adapted for the successful working of a purely scientific association, and we believe that there are not less than two hundred of its members who would rejoice in the privilege of attending all its semi-monthly sessions, and taking part in its labors, if its meetings were devoted strictly to scientific discussions and reports. And now, as the Academy is about to define its position and fix its character for another biennial term, why should not its officers be selected and its programme laid down with direct reference to the exaltation and promotion of medicine and hygiene as a science?

THE WEEK.

If a physician should regularly publish his cases in the secular papers, we doubt if there is a medical man who would not conclude that such physician was not only a charlatan at heart, but also in practice. We doubt, also, if there is a society, even among the most irregular practitioners, which would not summarily eject such a member from its fellowship. But, is the act any the less offensive when a society of medical men detail their cases to a reporter for the public press, and permit the report to be published under the sanction of the society? We think not, and, on the contrary, can but regard the act as still more disreputable. Two medical societies of this city have assumed a position which will be considered by every honorable mind as on a level with that of the advertising quack. We refer to the New York Academy of Medicine

and the Medico-Chirurgical College; the organ of the former society being the *Daily Times*, and of the latter the *World*. The Academy of Medicine occasionally protests, and has even ejected from its meetings the acknowledged reporters; but still garbled reports of its proceedings regularly appear in the public prints. It matters not whether the proceedings are furnished to the public press by a reporter, or by some lack-brain seeking personal notoriety; the violation of well established ethical rules is equally palpable in either case. Following the example of this body, which gives its code of morals to all inferior societies, we now have the Medico-Chirurgical College publishing its proceedings in the *World*; and we may yet have to look for the proceedings of the Pathological Society in the columns of the *Herald*. Now, it is high time this species of empiricism was rebuked and discarded by the profession. The Academy of Medicine, the parent society, should not only refuse the admission of reporters to its meetings, but should also ordain that any member who furnishes a report of its proceedings to the public papers is unworthy longer to retain his membership. If that society seriously desires to put an end to this semi-monthly advertisement of certain of its members, it can very readily accomplish its purpose. The Medico-Chirurgical College is a flourishing society, and its proceedings are full of scientific interest; but we can assure its members that no man of good sense reads their remarkable cures, paraded in the columns of a daily paper, with any more confidence than he does those in an adjoining column by Mrs. Winalow. They are thereby placed upon the same level, and are to be classed in the same category of advertisements. We hope that society also will prevent similar publications in future.

At the recent meeting of the *Scott Co. Medical Society*, at Davenport, Iowa, Dr. PARRY offered resolutions declaring stramonium weed a nuisance, and requesting the city council to take measures for its extirpation. Cases of poisoning by stramonium seeds are sufficiently frequent in this city and Brooklyn, to render that plant a nuisance, and make its removal a matter of public necessity.

FUMIGATION, like most other methods of topical medication, though of very ancient origin, has long been generally laid aside in consequence of the difficulties and uncertainties that have attended its use, except, perhaps, in the employment of mercurial or aqueous vapors in the treatment of croup. The profession is indebted to Prof. Mathews for the device and perfection of a very ingenious and neat apparatus for the vaporization and inhalation of volatilizable medicines. In another column this apparatus is fully described, and some suggestions are made respecting its probable utility. The fact that the gentleman who has devised the apparatus has furnished something that is far superior to any form of medicated cigarette, and, although a layman, has had the good sense to offer it to the medical profession for such uses as can legitimately be made of it, instead of selling it for the purposes of quackery, should recommend it to notice and a fair trial of its merits. The observations of Sir James Johnson on the therapeutic use of narcotic inhalations, and of Dr. Nevins and others on mercurial and other medicated fumigations in various affections, seem to warrant the opinion that more attention should be given to such modes of medication in some of the more obstinate and acute diseases of the air passages.

Reviews.

CHEMISTRY IN ITS RELATIONS TO PHYSIOLOGY AND MEDICINE. By GEORGE E. DAY, M.A. CANT., M.D., F.R.S., Professor of Medicine in the University of St. Andrews. With Plates and Illustrations. London, Hippolyte Baillière; New York, Baillière Brothers. 1890. 8vo. pp. 527.

A DISTINGUISHED iatro-chemist, who has both originated and solved as many questions as any student of zoo-chemistry, justly remarks, that "we have just attained a position in physiological chemistry where we can ask important questions, whose answers, even in part, the near future does not yet promise." (*Lehmann's Manual, American Edition*, p. 7.) The statement and discussion of such questions in anticipation of the specific elementary knowledge that would be required for their answers has contributed both to fascinate the student and to produce unwarranted scepticism and hesitancy in some practical minds. But chemistry, and particularly animal chemistry, is the most progressive, and consequently, the most unsettled of the natural sciences. And yet the applications and uses of such knowledge, incomplete as it is in many respects, are so infinitely varied and valuable that we justly point to this rapidly developing department of science as a happy illustration of the progress and practical utility of the experimental and medical sciences of our day.

That the voluminous and excellent works of Lehmann, Franz Simon, and Robin and Verdeil, have neither exhausted the resources of iatric-chemistry, nor rendered unnecessary another treatise thereon, is sufficiently manifest in the advent and character of the admirable volume which Dr. Day and the Messrs. Baillière have just presented to the medical profession. It will be recollected that the same publishers brought out the rich work of Robin and Verdeil, and that Dr. Day has been the translator and editor of the works of Lehmann, F. Simon, and other German authorities that have been given to English readers. No living authority in chemical science and physiological science could more fully estimate and provide for the precise wants of medicine in this department, than St. Andrew's distinguished teacher. He has produced a treatise of unequalled merit, and to us it appears to be exactly adapted to the present wants of medical practitioners and the most advanced students in physiological chemistry. Taking the *Handbuch, Lehrbuch, and Zoochemie* of Lehmann, as outline guides, Dr. Day has, with admirable success, brought forward and utilized the various and rich fruits of the more recent labors of Bidder and Schmidt, Bischoff and Voit, Scherer, Bernard, and Frerich, together with such American and English chemico-physiologists as have contributed new facts in this department of knowledge. Probably there is no other physiological chemist who could have performed this labor so effectually; and, as the Professor of Medicine in an English University, Dr. Day both represents and properly estimates the practical demands of the medical public for such a treatise as his unequalled facilities have enabled him to produce. Equally familiar with all the details of chemical and of physiological and medical science, he has manifestly endeavored to present the principles of zoo-chemistry from a *physiological*

point of view, entering, as he says in his introduction, "much more fully into the physiological than into the chemical relations."

The subject matter of the volume is considered under the great heads or departments into which it is so naturally divided, in the structure and phenomena of the animal organism, viz.:—

1. The organic substrata of the animal body.
2. The chemistry of the animal juices and tissues.
3. The great zoo-chemical processes.

Under the first division, the proximate principles of the organism are treated concisely and with great clearness. The several sections of the subject are complete, and there is no unnecessary detail of unsettled questions; but the great practical facts are forcibly and clearly presented. The following remarks conclude the section on the lactic acid group:—

"The lactic acid, which is thus widely diffused throughout the animal fluids, may be referred to a treble origin. No one can doubt that the acid found in the contents of the intestines, and in the chyle after the digestion of vegetables, owes its formation to the amylaceous or saccharine matters contained in the food undergoing a change similar to that which takes place in the fermentation of milk; moreover, the sugar which is formed in the liver, both in carnivorous and herbivorous animals, is similarly converted in the blood into lactic acid; while the acid which is found in such large quantity in the muscles cannot be referred to these sources, but must be considered as a product of the metamorphosis of the muscular fibre—a view confirmed by the fact that the amount of free acid is proportional to the extent to which the muscles had been previously exercised.

"The physiological value of lactic acid is by no means inconsiderable; for, in the first place, in association with free hydrochloric acid, it essentially contributes to the digestive power of the gastric juice, no other mineral or organic acid possessing the property of being able to replace these; secondly, the free lactic acid in the intestinal canal assists materially in promoting an absorption or transudation of the digested food into the alkaline blood or lymph, in accordance with the known laws of endosmosis; thirdly, the alkaline lactates are excellent supporters of animal heat, in consequence of the rapid combustion which they undergo in the blood; and, lastly, it is probable (as Liebig supposes) that an electric tension, influencing the function of the muscles, is established by the acid muscular juice and the alkaline contents of the capillaries."

Again, in illustration of the author's style of treating the practically important questions relating to the nature and history of the proximate elements, we will quote one of his closing remarks respecting urea:—

"It is well known that the origin of urea is still a *questio vexata* amongst chemists and physiologists. . . .

"It admits of no doubt that urea is formed from the nitrogenous constituents of the organism, its artificial production from such substances affording the strongest evidence on that point; in addition to which we may add the facts observed by Lassaigne, Scherer, and others, of urea being contained in the urine excreted after nearly three weeks' starvation. As the metamorphosis of tissue occurs with the greatest activity in the muscular system, and as, further, increased bodily exercise augments the amount of urea, we are justified in regarding the urea as formed for the most part from the worn-out muscular fibres, although it is most probable that other vital tissues may contribute to the general amount. Whether it is formed in the organic particles at the moment of their disintegration, or whether it is first formed in the blood, is a point which cannot be considered as decisively established."

This style of writing on Animal Chemistry is just what

the medical reader desires. It is lucid and concise, and needless questions are not involved in the author's statements. This is particularly true in his chapters on the Digestive Fluids, the Blood, and the Secretions; and care has been taken to ascertain and state "the quantities in which the various glandular products are secreted, a point to which little attention had been paid until the last few years; although the importance of such numerical data, in reference to the general metamorphosis of the tissues, now seems too obvious to require comment."

The chapters on the Digestive Fluids, Digestion, and Nutrition, will be studied with peculiar interest and profit by every reader. The author has clearly stated the facts which constitute the basis for the more advanced conclusions to which the discoveries in vital chemistry now lead us, and he carefully lays down the laws that the latest and the best proven discoveries seem to establish.

(To be continued.)

Progress of Medical Science.

OPHTHALMOLOGY.

By HENRY D. NOYES, M.D.

(Continued from page 357.)

Contributions to the Knowledge of Defects of Refraction and of Accommodation of the Eye. (Beiträge zur Kenntniss der Refractions- und Accommodations-Anomalien.) By F. C. DONDEERS. *Archiv für Ophthalmologie*, Bd. ii. s. 210-243.—The next subject in order is the influence of age upon accommodation and refraction. The alterations in the eye due to advancing life are, some of them, patent to ordinary inspection. These are, diminished lustre of the cornea and conjunctiva; the pupil becomes smaller, the sclerotica and iris more opaque, the anterior chamber is shallower—the arcus senilis forms. By anatomical dissection other changes are discovered: adhesions of the hyaloid membrane with the retina, and in consequence secondary alterations of the latter; calcareous plates in the posterior portion of the sclerotica; changes of the choroid; atrophy of the m. Brückiani (tensor choroideæ); increased density and yellowish tinge of the lens; impaired clearness of the vitreous humor. Loss of transparency of the media is signally shown by the difference to the ophthalmoscope between the beautifully clear and bright fundus oculi of a child and its dimmer illumination in old age. Among these changes we now have to do only with those pertaining to the accommodation and refraction.

In the first place, those of the accommodation. These appear a long time before any change takes place in refraction. The remotest point of vision is for a long time unaltered, but the nearest point at an early period begins to be farther removed from the eye. In this way accommodation becomes abridged. The removal of the near point is a fact long known, but it is an error to say that it does not begin until the 40th year. At this age it is so far away as to cause confusion of vision; but the near point began its retreat in youth, and before puberty.

This change affects myopic, hypermetropic, and emmetropic eyes. The question arises, why does the near point begin to retire so early, at a time of life when muscular force is at its fullest vigor—(adjustment of the eye being affected by the action of muscular fibres)? The m. Brückianus is still in full activity. The explanation is to be found, as I believe, in the increased density of the crystalline lens. This appears to me to begin even in youth, and therefore the lens will not so readily change its form under the compression of the tensor choroideæ.

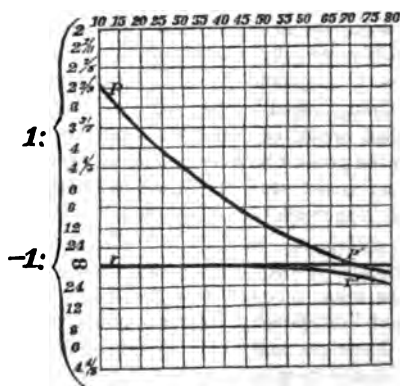
The power of Refraction begins to fail after the adjusting power has very decidedly lost ground. By this additional defect the remotest point of vision is made to retire from the eye. Consequently the focus of the rays is carried to a point behind the retina. The diminution of Refraction does not occur until advanced age, viz. in a healthy eye, not until the 55th or 60th year. A convex glass is then needed for even distant vision. There are, however, great differences among persons, in this respect.

What is the cause of the diminution of refraction? Flattening of the cornea and shortening of the antero-posterior axis of the globe have been assigned as causes. To me it seems most probable that the cause is found only in the crystalline lens. Advancing age affects the lens in two ways, viz. in change of position and in change of structure. The lens and the iris are together pushed forwards. This causes the apparent flattening of the cornea and the real shallowness of the anterior chamber. But this change would produce an optical result exactly the opposite of the known fact: the focus, instead of receding, would be advanced. The retrogression of the focus is really caused by the change of structure of the lens, and this is able to more than neutralize the optical influence of its movement forwards. The change of structure consists in the condensation of the exterior laminae, and the flattening of the convex surfaces. Thomas Young, Senff, Listing, and others, have shown that the laminated structure of the lens and the less refractive power of its outer layers in early life, give it a shorter focal distance than a lens would have, which should be of uniform density, even though its entire substance had the high exponent of refraction of the nucleus. When, therefore, the exterior layers, by old age, become condensed with the nucleus, and the lens is consequently harder and more homogeneous, its focal distance is actually lengthened.

The flattening of the curvatures will manifestly also increase its focal distance.

In the vitreous humor a diminution of refraction is also caused by the flattening of the lens. Since the concave surface of the hyaloid fossa disperses the rays which the lens has made convergent, a less degree of concavity of this surface will abate the amount of dispersion—permit the resultant focus to fall upon a point further behind.

The following diagram presents the positions of the near point and the far point, at different ages, in the normal eye:—



The figures upon the left side are the distances to which the eye can be adjusted (in Paris inches); the figures below ∞ (infinity) have a negative value, they give the distances behind the retina, at which converging rays come to a focus: pp' is the course of the near point, rr' that of the far point; the figures on the upper side give the ages. Upon the lines pp' and rr' may be read off the near point and far point for each age, and the distance between these lines gives the range of accommodation. The distance between each horizontal line represents $\frac{1}{4}$ of accommoda-

tion. It is seen that from the tenth year the near point recedes from the eye, until at the thirtieth year the accommodation has been reduced to one half of what it was at ten years. The diminution is not so rapid after this, but progresses steadily until the greatest age.

The course of the remote point is quite otherwise. Up to the 40th year it remains stationary; at the 50th year it begins to retire, and the eye becomes hypermetropic; and by the 70th or 80th year this will amount to $\frac{1}{4}$. Sometimes the hypermetropia becomes absolute; that is, the eye is unable to accommodate for divergent or parallel rays, but only for convergent rays.

Another diagram presents the individual observations, from which the above diagram is designed. The lines pp' and rr' may be regarded as the average result of many observations and approximatively correct. To render it more clear by an example: Take the age of 20 years to find the distance of the near and far points. Following the vertical line down until it intersects the line pp' —the figure upon the horizontal line nearest to it, but above it, is $3\frac{1}{2}$ inches; that is, the near point is situated at about $3\frac{1}{2}$ inches from the eye. For the far point, going down to the line rr' it is found to be ∞ (infinity). The breadth of accommodation of most persons at 25 years, is given by the equation $A = \frac{1}{p} - \frac{1}{r} = \frac{1}{25} - \frac{1}{\infty} = \frac{1}{25} = .04$. The accommodation = $\frac{1}{25}$.

Another instance at 50 years: $p = 12$ inches; r is beyond ∞ , and a negative quantity, but the error from omitting this quantity will not be large, and the fraction may be neglected. The accommodation will be $A = \frac{1}{p} + \frac{1}{r}$ (to estimate $\frac{1}{r}$, it must be remembered that each space between the horizontal lines equals $A \frac{1}{4}$: now rr' lies about $\frac{1}{4}$ th of the space below ∞ , as measured upon a scale of equal parts, $+$ $\frac{1}{4}$ therefore would be about $\frac{1}{4} \times \frac{1}{4}$, it will therefore be rather more than $\frac{1}{4}$. The difference in ability of accommodation at the ages of 25 and 50 years will be given by $\frac{1}{25} - \frac{1}{50} = \frac{1}{50}$: or about $\frac{1}{50}$ th of the whole adjusting power has been lost in 25 years.

What are the facts of Myopia at different ages? The notion is common that because myopic persons can see minute objects by dim light, and in advanced life need no glasses for near vision, their eyes are especially strong. I assert without hesitation that the myopic eye is a diseased eye. There is more than a mere anomaly of refraction. In addition to this, there is distension of the eye, with elongation of all its diameters, and chiefly of the antero-posterior axis. When this distension shall have reached a certain grade, the membranes become thinned at the posterior pole, and the resistance being thus diminished, the distension yet more increases. Herein consists the progress and the morbid character of myopia. To do as much as possible to prevent the ocular distension and the consequent increase of myopia, Prof. Donders lays great stress upon the avoidance of the habit of reading or working with the head bent forwards. This attitude, he thinks, greatly favors congestion of the eyes. Progressive myopia is always dangerous: threatening symptoms often accompany it, and at length sight may be utterly lost, by sub-retinal effusion, by extravasation of blood, or by atrophy and degeneration of the yellow spot.

The number of myopic persons examined was more than fifteen hundred. In later life myopia often appears to diminish, but its actual decrease is very uncommon, notwithstanding the senile changes of the lens tend to produce hypermetropia. The general notion is to the contrary; the error is founded upon the estimate of myopia from the near point of vision, instead of from the remote point, and upon the fact that vision is made more distinct, because in old age the pupil becomes narrowed: the smaller pupil diminishes the extent of dispersion of the rays, and thus sharpens the retinal picture.

I make three categories of myopia, viz. 1st, Stationary; 2d, Temporarily progressive; 3d, Constantly progressive. These cases are each set forth by diagrams. The first class

are those whose myopia is not greater than $-\frac{1}{4}$.* In calling these cases stationary, I yet mean to admit a slight increase, as may happen between the thirtieth and fortieth year, amounting to $-\frac{1}{8}$, but this increase may be disregarded. It is in these lighter cases that a real diminution of myopia may occur between the sixty-fifth and eightieth year, by changes in the lens. The second class of "temporarily increasing myopia" at first amounts to $-\frac{1}{4}$: the increase takes place between the fifteenth and thirty-fifth year, being most rapid from the eighteenth to the twenty-second, and may reach $-\frac{1}{2}$. The third class of "constantly increasing myopia," have at first the myopia as great as $-\frac{1}{2}$. It steadily progresses, but at the fastest rate up to the thirty-fifth year, after that more slowly. It may reach $-\frac{1}{2}$ or more. By sixty or seventy years of age an eye which is so extremely myopic will very seldom be a useful organ. Other symptoms arise, such as muscæ volitantes, photopic appearances, scotomata. To such persons, topical bloodletting, foot baths, and other derivatives are of little avail; even the cold douche is not tolerated by the eyes. They find most relief from light blue concave glasses, adapted to bring distant objects into focus.

Hypermetropia is set forth by diagrams in the same way as myopia. Three different grades are arbitrarily made. In them all a certain degree of hypermetropia is ascertained without the use of atropine; another portion is obtained after using atropine. The latter is the latent hypermetropia, and is to be added to the former. In the first grade, the hypermetropia is latent until the twenty-fifth year, amounting at first to $+\frac{1}{4}$, and afterwards begins to be manifest. Then if proper glasses are not employed, asthenopia makes its appearance. Before the fiftieth year, the hypermetropia becomes absolute; that is, both near point and far point are negative: they lie beyond ∞ . The second grade has at first latent hypermetropia of $+\frac{1}{4}$, it becomes manifest before the twentieth year, and often with it asthenopia. Before the fortieth year hypermetropia is absolute; only with positive glasses, to make the rays convergent, can near objects as well as distant objects be pictured on the retina.

The third grade is so high that at the tenth year, which is the starting point in all cases, the manifest hypermetropia already reaches $\frac{1}{2}$; the total hypermetropia being $\frac{3}{4}$. The range of accommodation is exceedingly narrow. Glasses are needed here early; for near vision, glasses stronger than for distant vision. The visual power is never so sharp as in normal eyes. The cause often consists in abnormal curvature of the surfaces of the media.

PRESBYOPIA.

We have seen that the deviations from the normal refracting power of the eye can only be in two directions: and these departures we have called myopia and hypermetropia. In these cases, as also in emmetropic or normal eyes, the adjusting power may become impaired, and to this we have called attention. What are we to understand by presbyopia? Not simply that such an eye sees sharply at a distance, for this the normal eye can do. It is only that such an eye cannot see near objects well. It conveys an error to call such an eye "far-sighted," as if distant vision had become keener. Presbyopia is, therefore, that condition, in which from increasing age, the range of accommodation has become narrowed, and the discernment of near objects more difficult. It is no more a defect or anomaly than the grey hair or the wrinkled skin of age.

When does presbyopia begin? By consulting the diagram, page 372, it is seen that from early youth the near point begins to recede, and that it is never stationary. Hence the difficulty of fixing the commencing point of presbyopia: it must be one of conventional selection.

* The glass they require is -24 : and the myopia is expressed by $-\frac{1}{4}$.

† That is, they need a positive glass of 16 inches focus: the hypermetropia is expressed by $+\frac{1}{4}$.

Between 40 and 45 years the near point is at about eight inches distance (see diagram)—then many persons will desire a glass, at least to use in reading by night. Many will see sharply when the near point is at ten or twelve inches distance. Since there are great differences among individuals in this respect, I take the smallest distance as the incipient point of presbyopia. I fix it at eight inches. I do this to erect a standard of comparison. For instance, a person presents himself to be fitted with glasses. His near point is at sixteen inches. His presbyopia will be $\frac{1}{16} - \frac{1}{8} = \frac{1}{16}$: if the near point be at twenty-four inches, his presbyopia will be $\frac{1}{24} - \frac{1}{8} = \frac{1}{12}$. In these two cases the glasses required will be $+\frac{1}{16}$ and $+\frac{1}{12}$: they will so far neutralize the presbyopia as to bring the near point to eight inches. Very often, indeed generally, weaker glasses than these may be prescribed, because the convergence of the visual axes which these glasses produce will bring the near point closer than eight inches. I said above that many persons at 45 years see clearly even to ten and twelve inches, instead of requiring the object to be at eight inches: they will prefer weaker glasses. The following may be taken as the governing principles for the choice of suitable glasses:—the duller the visual perception, the closer must the near point be brought to the eye: at 70 years of age the near point must always be within six or seven inches. The larger the range of accommodation, the closer must the near point be brought. This applies mostly to young persons with hypermetropia; in their case the middle point of accommodation, which is the distance to which the glasses are preferably adapted, lies too far from the near point. Lastly, I may add that the glass which will be generally found sufficient, is the weakest one which will enable the patient to read No. 1 of Jaeger's text print (diamond) at one foot distance: providing no hypermetropia be present.

Hitherto we have considered only the presbyopia of the normal eye. Both the hypermetropic and the myopic may acquire presbyopia. The first has done so whenever the near point lies further than eight inches, in spite of glasses which neutralize the hypermetropia. This takes place earlier in the emmetropic eye, because the accommodation begins to narrow sooner. Such persons require two kinds of glasses: for distant vision those which simply neutralize the hypermetropia; for near vision, reading, writing, etc., they need stronger glasses, whose additional power equals the degree of presbyopia, and which will bring the near point to eight or ten inches.

Myopic persons may also acquire presbyopia. The degree of Myopia, capable of Presbyopia, must of course not be greater than $-\frac{1}{2}$. To these persons Presbyopia becomes an advantage, a compensation in age for the disadvantages of earlier life. It happens constantly that persons of 55 or 60 years will read print at eight or ten inches, without any assistance of glasses.

If you tax them with having been formerly myopic, they smile a complacent denial. Then test them with Jaeger's print No. 19 (six line pica), at twenty feet distance. They cannot read it, and unwillingly plead guilty to the indictment. This test may be assumed as a standard; all normal eyes are equal to this effort. If myopic persons need a convex glass, it must of course be a weak one. An eye having a strong degree of myopia can never become presbyopic. Its accommodation will become curtailed by age, but the near point will not recede further than eight inches. Here this arbitrary term, presbyopia, displays its unfitness. For the senile changes of the strongly myopic eye are the same as of the emmetropic, but the term presbyopic cannot be applied. But "verba valent usu"—the "usage which gives value to words" has weighed more with me than logic or etymology. While the word is retained, its significance should be carefully defined. All that pertains to hypermetropia and to paralysis of accommodation must be shorn from it. The word should be left to indicate only the abridgment of accommodation which old age produces. Thus stripped of superfluities, and rigor-

ously kept within its own boundaries, the relations of Presbyopia to Myopia and Hypermetropia will be readily understood.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, SEPTEMBER 26TH, 1860.

Dr. E. KRACKOWIZER, M.D., President in the Chair.

APOPLEXY IN A LAD 17 YEARS OF AGE.

Dr. ALONZO CLARK exhibited in behalf of Dr. Beach a brain which was the seat of apoplexy. The deceased, an apprentice boy, 17 years of age, came to his work as usual, 6 o'clock yesterday morning. His employer soon after observed that he had no disposition to work, and on asking him the reason, he stated that he felt dull. The lad was advised to go into the yard and take the air, which failing to make him feel any better, he went to bed. About fifteen minutes after this he was discovered by his employer to be seemingly asleep, and he continued in this state until about 12 o'clock, when he was found dead.

Autopsy.—On making a section of the left hemisphere, a clot was discovered within an inch of the posterior extremity of the cerebrum, extending an inch and a half downward, forward and outward, opening into the lateral ventricle.

The chief interest of the case I suppose is to be found in the fact of the accident occurring in a young man 17 years of age, and its presenting itself in this particular manner. He felt sleepy and dull for perhaps half an hour before he became insensible, and in that time it is probable that this effusion was going on from a small vessel somewhere; that the blood gradually accumulated so as to burst into the ventricle, which then filled up more readily in consequence of the less amount of resistance made to its escape during sleep. I think Dr. Beach told me at the time of making the examination, blood was found at the base and on the exterior of the organ. That being the case, it must have escaped in the direction of the vessels that entered into the ventricle. The existence of blood upon the surface, whether upon the convexity or base, and not on the central portion, would be pretty good evidences of a blow having been inflicted. It was reported that no disease of the heart existed.

FATTY DEGENERATION OF THE HEART AND PANCREAS.

Dr. FINNELL presented two specimens, a pancreas with stomach attached, and heart, in behalf of Dr. Guernsey, who requested him to make the autopsy. The deceased was 52 years of age, large and fat, with a good muscular development. About ten or twelve days before death he was seen by Drs. Jos. M. Smith and Detmold.

Autopsy.—On making an incision through the abdominal wall, the intestines were found very much distended with gas, and on raising the stomach from its position, a small amount of pus was noticed to flow from the region of the head of the pancreas. The organ was removed, with the stomach attached; it was firm to the feel, very much surrounded with fat; was about three times its natural size, and was found to have undergone fatty degeneration throughout the whole of its extent. The heart was also removed. The organ was hypertrophied, weighing sixteen ounces, and the left cavities were both dilated, presenting the well marked appearance of fatty degeneration. There was a slight amount of atheromatous deposit in the aorta, but no organic disease of the valves existed. On making an incision through the substance of the organ at its apex, the fatty degeneration extended fully a quarter of an inch

into the substance of the muscular tissue. The lungs were in a healthy condition, and free from tubercles and all inflammatory adhesions. About eight ounces of serum were found in each pleura. There was no other lesion present worthy of notice.

Dr. DETMOLD made the following additional statements in relation to the case:—The patient was seen by Dr. Jos. M. Smith and myself about ten or twelve days before death. We found a man lying perfectly horizontal upon the bed, bloated in appearance, and with somewhat difficult respiration. The pulse was exceedingly feeble, being for the most part filiform in character, and only every now and then there would be two or three distinct beats. The trouble about the respiration seemed to be the prominent one. The disease of the pancreas was not at all manifest; it is true he complained of some pain in that region, but could not tell whether it was internal or in consequence of a blister which had been previously applied there. There were no constitutional symptoms that pointed to any difficulty in that quarter. Some vomiting was present, which however, ceased on the judicious administration of stimulants. There was no sign of any trouble about the lungs, but the impulse of the heart was so exceedingly feeble that it could not be felt with the hand. When he went to sleep for any length of time he would wake up with more oppression than before; this symptom was also aggravated whenever he attempted to raise himself from the horizontal position. There was venous congestion over the whole surface of the body, which increased as death approached, when the pulse became entirely filiform in character. The man had been a very free liver and drinker, and during all the time that I saw him he had to be kept up with large quantities of stimulus, which treatment, however, would make not the slightest impression upon the pulse. There was no *arcus senilis* present. The diagnosis made by Dr. Smith and myself, was fatty degeneration of the heart without valvular disease. This conclusion was arrived at from negative symptoms. There was evidently an impediment in the circulation, as was clearly indicated by the condition of the pulse and the horizontal position of the body; and besides the condition of the body generally showed a tendency to the accumulation of fat. No abnormal sound of the heart could be detected.

Dr. CLARK remarked that in the case narrated there seemed to be a difficulty in applying the plan of exclusion, inasmuch as at the particular period when the patient was seen by Dr. Detmold, the heart had lost any power to contract upon the column of blood with sufficient force to produce a murmur. Valvular disease under those circumstances is much more likely to manifest itself by irregularity than by the presence of any special murmur. At the same time, if I should see a case in which there was evidently severe cardiac symptoms, the patient not being disposed to have the head rest high; the heart not materially enlarged and no murmur present; if these symptoms existed, together with a marked irregularity in the pulse, I should feel authorized to make out a case of fatty degeneration. I should, however, require all these symptoms to be present before coming to such a conclusion.

EXTENSIVE HYPERTROPHY OF HEART.

Dr. GARRISH presented an hypertrophied heart removed from the body of a man, 30 years of age, who was a ship-builder by occupation. The patient had always considered himself in the enjoyment of good health up to December last. At that time, by all accounts, he suffered from an attack of bronchitis, which lasted something like two or three months, when he noticed for the first time marked difficulty in breathing. Last May he married, after which his symptoms of dyspnoea became aggravated; and a cough of quite a severe character made its appearance, attended with the occasional expectoration of slight bloody mucus. He was then obliged to leave off work, not having missed a day before. Two or three different physicians who saw him at that time came to the sage conclu-

sion that the liver was affected, and accordingly put him on a course of treatment in which blisters, mercury, and tartarized antimony were freely used. The effect, though not the one desired, was very decided upon the patient. Dr. G. saw him about ten days before death, when the dyspnoea was so extreme that he was unable to lie down, and it was with great difficulty that any history could be obtained from him. The stomach, in consequence of the remedies previously alluded to, was excessively irritable. On examination of the heart, a most violent impulse was discernible, extending over the whole front of the thorax, more particularly marked under each clavicle. A bellows' murmur was heard with the first sound of the heart, with most distinctness at the apex of the organ. Respiratory murmur throughout the whole of the lungs was very distinct, notwithstanding these organs were very much crowded to each side by the accumulation of serum in the two cavities of the pleura. On removing the heart and pericardium, the whole was found to weigh four pounds and six ounces. The aortic valves were extensively diseased, which was also the case with the mitral valves.

Dr. CLARK stated that the case was interesting, as showing how long a heart of that size could be carried without giving rise to serious disturbances in respiration. He also remarked that in cases of this sort the disease very frequently first shows itself in early childhood, and as the patient grows up the action of the organ so adapts itself to the particular case as to give the patient but little inconvenience. In answer to a question from Dr. Garrish, Dr. C. stated that simple dilatation of the heart was a very rare disease, he had only seen three cases. In all these there was a distinct wavy pulsation over the region of the heart; the region of dulness was large and the sounds were very indistinct.

The Society then adjourned.

STATED MEETING, OCT. 10, 1860.

E. KRACKOWIZER, M.D., in the Chair.

ACUTE MENINGITIS—DEATH.

Dr. ALONZO CLARK exhibited a specimen of acute meningitis, with the following history, for which he was indebted to Dr. P. C. Barker, house-physician to Bellevue Hospital.

William Norris, æt. 35, married, native of Ireland, a tinsmith by occupation, was admitted to Bellevue Hospital, Oct. 9, 1860, at 10 30 A.M. Two weeks previously to his admission, he was seized with vomiting, which continued persistently for several days, with no other symptom save constipation. The matter ejected presented nothing unusual in appearance. The vomiting having ceased, he returned to his employment, but was unable to perform his usual duties. On Wednesday, Oct. 3, he began to complain of a headache, which became more and more severe. On Thursday, a discharge began from the right ear, small in quantity and very fetid. Friday morning, at 9 o'clock, his wife heard a strange noise coming from the room in which he lay, and on going in found him in a fit and frothing at the mouth. He remained unconscious till 5 P.M., when he aroused sufficiently to answer questions. His bowels moved involuntarily several times during the day. The discharge from the ear ceased on Saturday. Of his condition from this time (Saturday) till Monday morning, she was unable to state, as he made no complaints. Monday morning, he lost all power of speech, and was unable to communicate his wants in any manner; and before noon, became completely unconscious, remaining thus till his admission to the hospital. On admission, completely comatose. Respiration 50, stertorous; pulse 148, weak; tongue nearly natural in appearance. Both pupils dilated, but while the left contracted somewhat under the stimulus of light, the right hardly moved. The extremities were cold, with some rigidity; urine passed involuntarily. Heat (by means of bottles of hot water and hot cloths) applied to the extremities, and carbonate of ammonia administered internally; the surface

became warm, and the pulse improved in force while the frequency was but little reduced. In this condition he remained till 4 30 P. M., when he died.

Autopsy, seventeen hours after death.—Rigor mortis well marked; body still warm; well nourished. On removing the calvarium, the dura-mater was found adherent to it in several places. On the anterior portion of the cerebrum, and underlying the arachnoid, there was an effusion in distinct patches of fibrine, and also of pus, the latter showing the characteristic leek-green appearance. No abnormal appearance of the petrous or mastoid portions of the temporal bone.

Dr. J. MARION SIMS remarked, that Dr. Clark's case brought to his recollection an epidemic of cerebro-spinal meningitis which occurred in Montgomery County, Alabama, during the year 1858, and which was remarkably fatal. It began some time in February, and like most violent epidemics, almost all of the first cases were fatal; very few recovered until the epidemic had continued some weeks, when the greater majority escaped. A very truthful description of the ravages of this disease was given by Dr. Aimes in some one of the American journals for February, 1849. Dr. Aimes gave the results of thirty or forty post-mortem examinations of the disease, and in every instance fibrinous exudation, greatest in extent at the base of the brain, was found to exist. I don't know, remarked he, whether pus was found in all these cases. Death took place rapidly, sometimes within twenty-four hours, and those who lived a week got well. There was a peculiar symptom which was quite characteristic of that epidemic, viz. the drawing backward of the head and consequent throwing upward of the chin, separating it widely from the sternum.

Dr. CLARK remarked, that cerebro-spinal meningitis prevailed as an epidemic in the state of New York, six or seven times within his knowledge. As usual, it spread over one or two townships. I have not known it to extend in schools as it is reported to have done in Europe. The greatest fatality had been, here as there, in children. With reference to its pathological condition, he believed that very generally, the effusion was in the spinal cord and at the base of the brain, rising a little upon the convexity but not usually covering the upper part. The disease was not always epidemic in character.

Correspondence.

TREATMENT OF THE PLACENTA.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In reply to a question from L. B., in No. XVII. of the AMER. MEDICAL TIMES, regarding the "general practice in treating the placenta," I can warmly recommend the following: A few minutes after the second stage of labor is completed, gently seize the fundus of the uterus in the left hand, and the funis in the right. In grasping the fundus uteri, the ulnar edge of the left hand must be pressed well backwards towards the spinal column, otherwise it will be difficult to obtain a firm hold through the lax abdominal parietes. Now, having proceeded thus far, simultaneously exercise gentle pressure downwards and backwards on the fundus uteri, with the left hand, and traction on the funis, in the same direction, with the right. Gradually increase your pressure and traction, till the placenta slips away, or till as great a degree of force is attained as the prudence of the physician may deem justifiable, or consistent with safety. In the majority of instances, as the pressure gradually increases, the volume of the uterus will slowly and perceptibly dissolve, till the placenta is expelled, and the "small, hard ball," so characteristic of a well contracted uterus, will remain in the left hand. It is of the utmost practical importance to bear in mind the brief directions I have given for the application of the left hand; for, if its

ulnar edge is not well pressed back towards the spinal column, a firm and reliable grasp cannot be obtained, and a total failure of the attempt will be the probable result. Again, if the operation be clumsily executed, a mass of distended intestines may intervene between the fundus and the hand, and be thus subjected to a "lemon-squeezing" operation, which may have the unpleasant effect of curtailing the physician's attendance, to say nothing of the patient's existence. This may be avoided by keeping the ulnar edge and palm of the hand in close proximity to the fundus uteri while sinking it backwards towards the spinal column.

Now, the results of a well conducted effort to "press off" the placenta may be various. 1st, and most frequently, The placental mass will be expelled both from uterus and vagina, without much difficulty. 2d, The uterus may be felt gradually diminishing under the pressure of the left hand, till it is fully contracted, and yet the placenta may still be retained; but the anatomical position of the retained mass in this case is favorably altered; for, on introducing the finger along the cord, it will be found lying loose in the vagina, from whence it can easily be extracted by drawing it downwards and forwards with the thumb and two fingers of the right hand. 3d, Notwithstanding the application of firm and well sustained traction and compression, the uterus may not yield, but determinedly retain its original dimensions. Now, in such a case, when we attempt to analyse the difficulty, one of three conditions will, in the great majority of cases, be ascertained to exist. *a.* A *tongue* of placenta may be felt projecting from the os, and lying in the vagina, while the *body* is retained within the cavity of the uterus, from spasmodic contraction of the cervix. *b.* The whole placenta may be encased within the cavity of the uterus, solely on account of this irregular or spasmodic contraction. *c.* There may be no spasmodic contraction, the os and cervix being quite dilatable; nevertheless, the placenta will resist every effort to expel it. In such a case the retention will depend on morbid adhesion, and extraction is, unfortunately, the only remedy. Conditions *b* and *c* may co-exist (spasmodic contraction and morbid adhesion), which will considerably complicate the case, and increase the difficulty.

Now, as the two former cases (*a* and *b*) are but modifications of each other, the same treatment is applicable to each. The spasmodic action of the uterus must be overcome by a very gradual and gentle introduction of the hand, till its widest part is embraced by the contracted portion, when, by expanding the fingers into the form of an arch, with the concavity towards the sacrum, the placenta may be drawn out between the palm of the hand and the posterior lip of the uterus, by exerting traction on the funis with the left hand, and assisting the expulsion of the mass by a series of flexion movements with the fingers of the right. If this will not succeed, the retention must be dependent on (*c*) *morbid adhesion*. The hand must be passed on into the cavity of the uterus, and the adherent placenta peeled from the surface to which it is attached. Never allow the placenta to remain more than a quarter of an hour after the birth of the child, without attempting its removal. If the retention is the result of *inertia*, compression and traction will produce its expulsion. If it depend on spasmodic contraction or morbid adhesion, the hand must be introduced; and the sooner it is done the better; for, if postponed for a lengthened period, the greatest resistance to its introduction will be encountered, and the difficulty and danger will be consequently increased. A partial introduction of the hand is all that is requisite in retention dependent on spasmodic contraction; its complete introduction is generally necessary when morbid adhesion exists. Never introduce the hand into the uterus, if it can possibly be avoided. It is a last and dangerous resource, and should never be had recourse to till gentler means have failed.

JAMES WILSON,

Licentiate of the Royal College of Surgeons in Ireland, etc., etc.
New York, 191 West 24th Street.

DOMESTIC CORRESPONDENCE.

BOSTON.

NOVEMBER 17.

It will not be as difficult a task as you of the metropolis may think to furnish the *MEDICAL TIMES* with an occasional letter upon interesting medical matter current among us. Boston has fairly won the highest place in the scale of literary excellence, and though Philadelphia has claimed to be the "hub" of the medical universe, in our humble opinion, our town will yet assume an enviable rank in the comparison. We are not a jealous-minded people, but we do wish to have a little credit for what we have done. We may fairly challenge New York or Philadelphia to show greater contributions to the medical sciences, and yet those cities are disposed to entirely ignore us. The discovery and demonstration of the good offices of ether ought to redound to the everlasting honor of the profession of our city. But you never seem to regard it as other than an *American* discovery. In book-making we may not be as prolific as the cities mentioned, but we are willing to submit to the severest comparison the quality of the few wares we bring to market. The writings of WARREN JACKSON, BIGELOW, CHANNING, MORELAND, DURKEE, and others, have a permanent place in the medical literature of our country. But without wearying you with these egotistical reflections, I will notice some recent events which may interest your readers.

The Massachusetts Medical Society held an adjourned meeting on the 7th inst. The Society wisely voted to appropriate the money annually squandered upon a dinner towards the payment of its debt. Would it not be well for other medical societies to be equally thoughtful and prudent? If a society has not a debt to pay, let me suggest that the same sum be appropriated towards obtaining prize essays. The venerable Dr. JACKSON presented an excellent photographic copy of the likeness of Dr. HOLYOKE, the first President of the Society. At a former meeting, the Society was presented with a full length portrait of Dr. JACKSON himself. The Society accepted the valuable legacy of the late HON. JONATHAN PHILLIPS, with which your readers are familiar through the public papers.

Boston is to have a Museum of Comparative Zoology, or rather Harvard University, which will be the same thing in fact. For this magnificent institution we are indebted to the energy and enterprise of PROF. AGASSIZ, its Curator and Director. It is but two years since this enterprise was set on foot, and now, according to PROF. A., we have outrun all the Museums of the European Universities, excepting those placed in large capitals, and among these we would occupy the ninth or tenth place. The resources of the Museum have been enlarged by repeated donations until it now has a fund of \$225,000, in addition to five acres of land from the University. The Museum was inaugurated on the 13th inst., Gov. BANKS presiding, when addresses were made by PRESIDENT FELTON, PROF. AGASSIZ, and Gov. BANKS.

FOREIGN CORRESPONDENCE.

PARIS.

October 15.

In accepting your proposal to communicate matters of scientific interest, occurring in this capital, to the *Medical Times*, I must be excused from entering much into detail, or from writing very connectedly. I may from time to time be able to keep your readers informed of whatever is novel in medical circles, and for the most part, note the principal papers and discussions before the medical societies. But I cannot assume the office of a reporter, or, in fact, of a correspondent, but must be allowed to jot down matters in my own way.

Insane Patient restored by an Operation for Cataract.—At the meeting of the Academy of Medicine, September 2, M. Bouisson of Montpellier reported the case of a blind

insane patient, restored to reason by a successful operation for cataract. The patient was a man aged about fifty years; there was no paralysis, or symptom of acute disease; but on examination a double cataract was discovered. He remained under observation a week, appearing as if demented, and quite indifferent to a proposed operation upon his eyes. The operation of reclamation was performed upon both eyes at once; no bad symptoms followed. In due time he was allowed to use his sight, when he at once began to manifest a return of consciousness and of reason. In a month and a half he returned to his home quite restored. The operator proceeded to consider the pathological and psychological bearing of the case; he did not doubt that the result of the operation restored the patient's reason, but he was not positive as to the rationale.

The True Nature of Albuminuria is the title of a paper communicated by Dr. Hamon of Fresnay. He regards albuminuria as a disease of the cerebro-spinal and ganglionic system, and not a local affection of the kidney. Christison offered nearly the same view of the disease, as early as 1829, but it was never accepted by Bright. Dr. H.'s first proposition is, that the phenomena of albuminuria depend upon a deranged innervation of the cerebro-spinal system. Bernard proved that by pricking the fourth ventricle at a point higher than that which produces diabetes, the urine will be rendered albuminous. All causes which violently affect the nervous centres, as convulsions, cold, etc., will produce albuminuria. 2. That the ganglionic system is affected is proved by the alteration in the character of the blood, and the various lesions of the secretory organs. 3. The nervous manifestations having their special seat in the nerves of animal and organic life prove the same fact. He proposes to call the disease *albuminurric neurosis*.

Spontaneous Generation.—This theory finds an ardent supporter in M. Pouchet. On the 8th of October a letter was laid before the Academy of Sciences from this savan, then at Messina, rehearsing some analyses which he has made of the air in different localities. He has tested the atmosphere of cities, marshes, sea, and mountains; in the first he found a great variety of organic debris; in the second vegetable matter; but far out at sea and on high mountains the air was very pure, and free from foreign materials. But whether he tested the air from the sea or from the top of Etna, he still obtained ciliated infusoria.

Medical News.

ARMY MEDICAL INTELLIGENCE.

BAILEY.—Assistant Surgeon J. C. Bailey has been ordered to proceed to Fort Defiance, and report for field service to Brevet Lieutenant-Colonel E. R. S. Canby, commanding the troops operating against the Navajoes.

SHORB.—Assistant Surgeon J. Campbell Shorb (lately appointed), has been assigned to duty with the detachment of recruits to sail from this port on the 21st instant for San Francisco.

SLOAN.—Leave of absence for four months has been granted Surgeon J. Sloan, Medical Department.

STATIONS OF ARMY MEDICAL OFFICERS IN NEW MEXICO AND ARIZONA.—Surgeon King, Medical Director; Assistant Surgeon Baily, Purveyor, Albuquerque; Assistant Surgeon Haden, Fort Bliss, El Paso; Assistant Surgeon Norris, Fort Craig; Assistant Surgeon Ghiselin, Fort Staunton; Assistant Surgeon Clements, Camp Fauntleroy; Assistant Surgeon Bill, Fort Defiance; Assistant Surgeon Irwin, Fort Buchanan; Assistant Surgeon Covey, Copper Mines; Assistant Surgeon Alden, Fort Garland; Assistant Surgeon Bartholow, Fort Union; Assistant Surgeon Ryland, Fort Breckenridge; Assistant Surgeon, Baily, Jr., attached to the Kioway expedition; Assistant Surgeon McKee, attached

to the Navajoe expedition; Assistant Surgeons Perin and Getty are en route to Texas with the 3d Infantry.

THE Board of Army Surgeons, which assembled in Baltimore on the 20th of September, was composed of Surgeons C. A. Finley, Charles S. Tripler, and N. S. Jarvis with Assistant Surgeon Charles H. Smith, Recorder. Sixteen candidates were authorized to present themselves for examination. Of this number eight failed to appear or withdrew, and eight were examined in full. Of this latter number five were found qualified, and have been appointed Assistant Surgeons in the Army of the United States. The names of the successful gentlemen are as follows, in the order of their relative merit:—Dr. Campbell Short, of Maryland; Dr. A. Francis Mechim, do.; Dr. Clinton Wagner, do.; Dr. David P. Ramseur, of North Carolina; Dr. William F. Cormick, of Virginia.

PERSONAL.

Prof. F. H. HAMILTON performed the operation of ovariectomy on the 17th instant, at the Long Island College Hospital.

Prof. J. B. S. JACKSON delivered the introductory lecture of the Massachusetts Medical College, November 14.

Prof. M. B. WRIGHT delivered the introductory lecture of the Medical College of Ohio, October 22.

Prof. B. S. LAWSON delivered the introductory lecture of the Cincinnati College of Medicine and Surgery.

Dr. W. H. MUSSEY, of Cincinnati, is giving a course of private instruction on Surgery, illustrated from the valuable museum of his father, Prof. R. D. MUSSEY.

Dr. W. CLENDENEN, of Cincinnati, late Demonstrator of Anatomy in the Medical College of Ohio, has just returned from Europe, and will give a demonstrative course on Anatomy.

Dr. E. WILLIAMS, of Cincinnati, gives a Clinic on Ophthalmology during the winter.

Prof. CALER GREENE, of Homer, New York, has commenced his course on Physiology and Pathology in the Geneva Medical College, New York.

Prof. CHARLES HOOKER, of New Haven, Connecticut, recently gave his *twenty-fifth* "grape entertainment;" the grapes, abundant and luscious, being grown in his own garden.

DEATHS.

WALCOT.—At Milwaukee, Wisconsin, October 28, ELIZABETH J., wife of E. B. WALCOT, M.D., and sister to JOHN B. DOUSMAN, M.D., of Milwaukee.

A COLONY CONSUMED BY FEVER.—A malignant fever recently broke out at McCarthy's Island, River Gambia, and was so fatal that but one European survived, and he had a severe attack.

TO CORRESPONDENTS.

Remarkable Fecundity.—Last week I attended a negro woman, age 50 years, in labor with her twenty-seventh child. All (27) were single births, all living at birth except one. From what I can learn, she has never had an unnatural labor; and never has had a physician with her, except with two of her children. The last child is a boy, weighing ten and a half pounds, a few minutes after birth. The labor was tedious. Her first child was born when she was at the age of seventeen. She has had two children in one year. She has a daughter, aged 82, who has had twelve children, all at single births.

Cascoo, Geo.

E. N. O. WARE, M.D.

Quack Advertising—Criminal Abortion.—I think you are doing justice to the papers which insert quack advertisements, and I hope you will follow them up. It is this mercenary spirit in our religious journals, which is the support of their murderous and disgusting advertisements. I wish you would send copies of those Nos. of the Medical Times in which you take the *N. Y. Examiner* to task, to the leading religious journals of the country, and mark your article. Its application is very wide. Our village paper, *The Republican*, has, I believe, rejected all of the abortion advertisements by reason of the expostulations of your humble servant. I like much what is said in the medical journals on abortion, but it does but little good to talk of it there unless these articles are republished in the secular journals. I shall offer some of them for republication in our papers. The public (not the medical) needs instruction, and an intelligent sentiment needs to be cultivated on this daily increasing evil. Religious papers need to agitate the question, for religious (?) people are as deep in this sin as heretics and unbelievers. Catholics are, however, less

guilty than Protestants. I would suggest that you give the hint, in the TIMES, that physicians will be able to do much against the nostrum vender and the abortionist, by securing the republication in the secular papers of articles on these topics, published in the medical journals. Coming from medical journals, they would have more weight in the public mind than any article on the subject prepared expressly for those papers.

HOMER, N. Y., Nov. 13.

C. G.

Pituita.—If you have not received a letter from us, please consider this an invitation to report the trial.

Raymond.—Our rule, in publishing deaths and marriages, is to insert only those which are properly authenticated. We are quite willing to publish the births and deaths in the families of physicians, if communicated by a responsible person.

S. G. S.—If you will refer to an early number, you will find a drawing of the original splint of Dr. Davis, for making extension in hip-joint disease. What you designate "Dr. Sayres' splint," is a modification of this splint, the principles of treatment remaining the same.

The Profession in the West.—"I am located far off in the country, near no physician. The nearest practitioner on the South is ten miles; on the West, twelve miles; on the East, thirteen miles; on the North, twenty miles. The western cities are overstocked with doctors. Many have been starved out of St. Paul's, Chicago, Milwaukee, and other large towns, but there are many small country towns where physicians may make from one to three thousand, annually—hard work, but good pay. You call the West the very garden of our future civilization; and if this is true, there is a mighty growth of weeds."

Nov. 13, 1860.

RACINE.

COMMUNICATIONS have been received from:—

Prof. CALER GREENE, N. Y.; Dr. E. J. FOUNTAIN, Iowa; Dr. GEO. K. AMERMAN, Ill.; Dr. S. J. SAWYER, Wisc.; JOHN MEAKIN, N. Y.; Dr. J. LAMB, Ind.; Dr. J. S. GREEN, Iowa; Dr. B. K. HART, Ill.; Dr. M. BISHOP, Ark.; Dr. S. EASTMAN, N. Y.; Dr. P. B. SCOTT, Miss.; Dr. E. S. NEWTON, Ohio; Dr. S. S. SLOAT, N. Y.; Dr. N. C. COOLEY, N. Y.; Messrs. WILLIAMS & Co., Mass.; Dr. A. M. LANE, Ohio.

METEOROLOGY AND NEUROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 10th day of November to the 17th day of November, 1860.

Deaths.—Men, 80; women, 88; boys, 102; girls, 74—total, 344. Adults, 168; children, 176; males, 182; females, 162; colored, 5. Infants under two years of age, 118. Among the causes of death we notice:—cholera-infantum, 2; infantile convulsions, 21; croup, 9; diphtheria, 15; diarrhoea, 2; dysentery, 5; scarlet fever, 18; typhus and typhoid fevers, 18; consumption, 55; small-pox, 4; droopy of head, 10; infantile-marrasmus, 22; inflammation of brain, 8; of bowels, 6; of lungs, 18.

Nov.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10	In.
11th.	29.41	.14	46	43	49	4	7	NW.	8	.08
12th.	29.54	.14	49	44	57	6	10	NW.	6	
13th.	29.80	.84	50	43	58	8.5	11	NW.	0	
14th.	29.93	.11	43	41	55	8	11	NW.	0	
15th.	29.97	.11	49	39	60	8	14	NW.	0	
16th.	29.99	.10	47	41	52	5.5	7	SW.	0	
17th.	29.87	.81	43	43	54	5.5	8	SW.	8	

REMARKS.—11th, light rain, A.M., wind fresh all day; 12th, variable skies, very light rain, P.M., wind fresh all day; 13th, fine, wind fresh, A.M., moderate, P.M.; 14th, fine, wind light, A.M., calm, P.M.; 15th and 16th, fine days, with calms; 17th, fog, A.M., cloudy, P.M., wind calm.

MEDICAL DIARY OF THE WEEK.

Monday, Nov. 26.	{ NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Macready, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Nov. 27.	{ NEW YORK HOSPITAL, Dr. Parker, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, half-past 1 P.M.
Wednesday, Nov. 28.	{ EYE INFIRMARY, Operations, 12 M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Gouley, half-past 1 P.M. N. Y. PATHOLOGICAL SOCIETY, half-past 7 P.M.
Thursday, Nov. 29.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M.
Friday, Nov. 30.	{ NEW YORK HOSPITAL, Dr. Parker, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Clark, 1½ P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Dec. 1.	{ BELLEVUE HOSP., Drs. Parker and Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. EMIGRANTS' HOSP. WARD'S ISLAND, Dr. Carnochan, 8 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

Original Lectures.

LECTURES ON STRICTURE OF THE URETHRA, PRELIMINARY TO THE CLINICAL COURSE ON DISEASE OF THE GENITO- URINARY ORGANS. DELIVERED AT THE UNIVERSITY MEDICAL COLLEGE.

BY
W. H. VAN BUREN, M.D.,
PROFESSOR OF ANATOMY, ETC.

LECTURE IV.

THE proper mode of commencing the exploration of the urethra by instrumental means, for the purpose of determining the presence of stricture, is to select a steel sound, of the largest size which the orifice of the canal will receive without forcible dilatation, and to attempt its introduction into the bladder. As the urethral orifice is the narrowest point in the whole canal, it would seem to follow that any instrument admitted here should traverse readily the remainder of its calibre. And thus regarded, the problem before us is apparently of very easy solution, for any obstruction to the passage of the instrument not caused by the presence of a foreign body, or tumor in the canal, or an abscess or other tumor pressing upon its walls from without, might be fairly assumed to depend on the existence of stricture. But in actual practice the case is far different. From the facts which I have already laid before you concerning the anatomy of the membrane which forms the walls of the urethra, and of the parts around it, its curves, its normal dilatations and contractions, and the membranes and tissues by which it is surrounded in its several divisions, you will be ready to understand that sources of obstruction might occur, differing from all of those just mentioned, and yet perfectly competent to prevent the passage of an instrument, even through a perfectly healthy urethra. That these do exist is rendered certain by the very frequent errors of diagnosis encountered in practice, and I am anxious to point out to you their seat and nature, and how they are to be avoided. In the first place, your sound should be made of steel, and not of soft iron or silver; the harder the metal, the higher the polish it will receive, and the longer it will retain it, being less liable to bruising and indentation; and absolute smoothness and polish are essential qualities in an instrument which is to be passed along in contact with the highly sensitive surface of the lining membrane of the urethra. In damp climates, or at sea, I know that silver-plating or gilding is necessary to prevent rust, but otherwise I regard them as disadvantageous. In the next place, its curve should represent, uniformly and accurately, an arc of a circle, three and a quarter inches in diameter—which, as I have already stated, is the average curve of the fixed portion of the urethra; and its point should always present a right angle to its shaft, affording thus an infallible indication of its position and direction when concealed from the eye. It is exceedingly desirable that those who wish to cultivate dexterity and tact in the use of urethral instruments should always employ the same curve. Finally, before attempting its introduction the sound should be well warmed and oiled.

You may think, gentlemen, that these directions are unnecessarily minute, but in all surgical operations close attention to minute details is one of the essential conditions of success. The mode of introducing the instrument is best demonstrated in a clinical lecture with the patient before you, and I shall therefore leave this part of the subject at present with the single remark, that it should always be done *quietly, gently, and slowly*. After entering the orifice of the canal there are three points at which the point of the sound is liable to be arrested, in a healthy urethra, by obsta-

cles which might be mistaken for stricture: the first of these is just in front of the triangular ligament; the second, in the membranous portion, opposite the *compressor urethrae* muscle; and the third, at the neck of the bladder. In regard to the first, it will be remembered that the normal dilatation, known as the "sinus of the bulb," occupies an inch and a half of the canal just before it engages in the hole in the triangular ligament. Now the mucous membrane forming the floor of this "sinus" is often so relaxed and extensible as to be pushed before the point of the instrument in the form of a fold, by which it may be arrested just when it should enter the hole in the triangular ligament. This occurrence is more likely to take place when the curve of the sound is too large—a very common fault, as its point is thus kept too closely in contact with the floor of the "sinus." This obstacle is to be overcome by withdrawing the sound for an inch or so, and altering its direction, so that its point shall traverse the "sinus" in contact with its roof, and at the same time the penis should be gently drawn forward upon the sound as it advances, so as to put the lining membrane of the canal upon the stretch. The obstruction liable to be encountered by the instrument in the membranous portion, is caused by spasmodic contraction of the "*compressor*" muscle; and this, in my opinion, is the most frequent source of difficulty in introducing full-sized instruments into a healthy urethra, and most liable to be mistaken for stricture. It is, in fact, a temporary spasmodic stricture, resulting from the irritation produced by the contact of a foreign body with the sensitive urethral membrane, and explained by reflex action. To overcome it, assure yourself that the axis of your instrument is precisely in accordance with the axis of the canal, and press its point firmly and steadily, but very gently, against the obstacle, and at the same time endeavor to divert the patient's attention by some question or remark on a subject entirely unconnected with the matter in hand; the "*compressor*" is a voluntary muscle, and you thus get rid of any influence that the will may exert in keeping up its contraction. Within a minute the point of the sound will generally slip through, if the manoeuvre is cleverly executed—often with the distinct sensation of having cleared an obstacle. To appreciate the cause of the impediment encountered just before the instrument should enter the bladder, I must recall to your recollection the dilatation of the urethra in its prostatic portion, formed entirely by the expansion of the lateral walls and floor of the "prostatic sinus," as it is called, and also the little transverse fold of the mucous membrane at the orifice of the bladder, called *wulva vesicae*. The point of the sound traversing the prostatic sinus, in contact with its floor, is liable to hitch against this fold, and be arrested in its progress. Depress the handle of the instrument so as to bring its point against the roof of the canal, after withdrawing it a trifle, and it will generally override the obstacle. I have known mistaken diagnosis of stricture to arise from each of these three causes of obstruction, and have therefore thought it proper to occupy your attention thus minutely in their consideration. By employing instruments with the curve, which I have advised, you will be less likely to encounter them. The sounds and catheters sold in the shops have almost invariably too large a curve, frequently representing arcs of several circles, mostly of greater diameter than that which I have indicated, and often perfectly straight in the last inch of their length. In using these instruments it is almost impossible to prevent their points from crowding along the floor of the urethra as they traverse it, and thus they are more liable to be arrested by the first and third obstacles described; whereas the point of a sound which has a small and accurate curve can be readily kept, during its introduction, in contact with the roof of the canal. Moreover, it is important to examine the finish of the instrument's point; this should be hemispherical, or very slightly conical, and perfectly smooth and even; shaped thus, it is less likely to excite muscular spasm, and better calculated to overcome an obstacle of this sort, when gently pressed against it.

With a fair knowledge of the anatomy of the urethra, and with due attention to the points just indicated, there is nothing further requisite to facilitate the recognition of stricture by the aid of the sound, unless it be the tact in its employment that is only to be attained by practice and experience. It is always to be borne in mind that many stricture patients are so sensitive and irritable as to render the greatest care absolutely necessary to avoid bringing on a chill, or an attack of retention, by a first exploration with instruments. To avoid this danger, the greatest gentleness should be observed, and the manipulation should not be prolonged. It is also advisable, before the instrumental examination, that the patient should be prepared for it by the administration of demulcents, containing an alkali, if the urine be acid, or other appropriate medication. A microscopical and chemical examination of the urine is also of great assistance in affording information as to the condition of the bladder and kidneys. It is often safer to defer an opinion until repeated examinations shall have been instituted, and thus the temper of the urethra and the nature of the stricture will be also more thoroughly ascertained. If permeable, its length may be determined by employing a flexible bougie with an olive-shaped bulbous extremity; the point corresponding with the urethral orifice being marked with the nail upon the bougie as soon as its bulb reaches the stricture on entering, and afterwards on withdrawing it. A wax bougie is also useful; if allowed to remain in the urethra a few minutes, and then withdrawn, it will receive an impression from the stricture which at once indicates its dimensions, and its degree of contractibility. As to the *porte-empreinte* so highly recommended by Ducamp, made by dipping silken threads in soft wax, I have little confidence in its utility. When the existence of a stricture has been thus demonstrated, if it will not permit the passage of a full-sized sound after the employment of gentle pressure, recourse must be had to instruments of smaller size, in order to determine its degree of contraction. In reference to this point, i. e. the degree of tightness of the stricture, the size of the stream of urine passed by the patient affords us only vague and general information, and is not to be trusted. This may be temporarily diminished, or even arrested entirely by spasm, by the lodgment of a clot of blood or mucus, or it may depend upon partial paralysis of the bladder with a urethra perfectly free from stricture. The successive introduction of instruments gradually diminished in diameter, is necessary, therefore, to determine this point. As a rule, steel sounds below the size known as No. 4 of the scale in ordinary use, should not be employed; the risk of perforating the urethral walls, and thus causing false passages, is so great as to render them more dangerous than useful, either for the purpose of exploration or of dilatation. Flexible bougies of French manufacture, and especially those with a tapering point, are the instruments I would recommend; these can be procured of all sizes, down to the diameter even of an ordinary pin, and the very smallest of them are exceedingly useful, far more so than their extreme flexibility would lead one to suppose. The recognition of false passages is a matter of importance, and often of difficulty; they are very frequent complications of stricture, and offer a very serious impediment to satisfactory exploration, to catheterization in retention, and to subsequent treatment. They are to be detected by the deviation of the exploring instrument from the normal direction of the urethra, by the peculiar sensations perceived under these circumstances, both by the patient and the surgeon, by the occurrence of hæmorrhage, and by the fact that the progress of the instrument is arrested, when by partially withdrawing it, and altering the direction of its point, it passes into, or through the stricture. A tapering bougie will often be sensibly grasped by a stricture, which opposes its progress—very rarely, if ever, by the walls of a false passage. Here the small flexible bougies I have just shown you are of great use. If one is arrested in its progress, and suspected to be lodged in a false passage,

leave it there, and introduce a second—the orifice of the false passage being thus already occupied, the second bougie may engage in the stricture, and be grasped by it, or it may pass at once into the bladder; by this manœuvre the co-existence of several false passages may possibly be detected in the same case, and their extent and direction may be estimated. The introduction of the finger into the rectum may also afford additional information.

It sometimes happens that a patient presents himself with symptoms of stricture, the orifice of whose urethra is preternaturally narrow, either from congenital contraction of the meatus, or from one of those forms of arrested development known as *hypospadias*, or *epispadias*. In such cases it has been recommended to enlarge the orifice by incision, so as to allow the introduction of a full-sized instrument, by which the remainder of the canal could be properly explored. This is a proceeding of very equivocal advantage; the incision becomes inflamed and indurated from the constantly repeated contact of urine, forms a very painful and irritable sore, which heals very slowly, and leaves behind it, almost invariably, an aggravation of the original contraction. I should prefer, in the majority of such cases, to explore and treat the stricture or strictures as successfully as I could, without meddling with the orifice. Chancres at the orifice are not unfrequent causes of contraction after their cicatrization; these strictures generally contract to a certain point, and then remain unchanged. Unless they are complicated by specific induration, removable by anti-syphilitic treatment, they are better let alone. You may receive it as a general rule, that strictures of the orifice of the urethra are not apt to be benefited by treatment.

Original Communications.

A CASE OF

VERY OBLIQUE TWISTED FRACTURE OF THE FEMUR

REMAINING UNUNITED FOR EIGHT MONTHS—OPERATION BY PROF. BRAINARD'S METHOD—CURE.

By HOMER O. HITCHCOCK, M.D.,
OF KALAMAZOO, MICH.

D. Y.— is a farmer of decidedly nervous temperament, — years of age, but much nearer "old age" than his years would indicate. He has for a long time been subject to bilious derangements as autumn comes on, often accompanied by a fever of an irritative type. On the 25th of August, 1859, two hours after he had been thrown from his wagon with great violence, I found him with an oblique fracture of the right femur. The plane of the fracture extended from without inwards and upwards, twisting completely to the under side of the bone. The length of the plane was from the upper part of the lower third to above the middle of the middle third of the femur, fully four inches. A modification of Desault's long splint, with the usual auxiliary short splints, was applied. The limb was readily extended to its normal length—extension and counter-extension being kept up by adhesive straps, and the ordinary perineal band, with a screw in the foot-piece of the long splint. The fracture was perfectly adjusted, and the limb carefully bandaged.

The patient had, in his accident, received a severe contusion in the perineum, and there was a laceration involving a strip of skin for one and a half or two inches long, by an inch or more wide, extending to a little within the verge of the anus. As this flap was likely to slough, it was removed, and the wound dressed with tr. arnicae and water. An intermittent fever of a decidedly irritative type followed the injury, which was greatly aggravated by the pain in

the perineum, and difficulty in defecation as well as micturition.

The limb was kept well adjusted, with the exception that about one week after the fracture the patient loosened the perineal band. This was tightened, however, soon after without inconvenience to him. The dressings were all reapplied as often as they became loosened, and the coaptation of the fragments, and the length of the limb, gave promise of an excellent result. The fever yielded after two or three weeks by the use of anodynes, nervines, and anti-periodics.

Four weeks after the accident there was no attempt at re-union. The fracture was perfectly adjusted, the limb was not shortened, and had never been much swollen, and there was, and had been, but slight pain or soreness at the seat of the fracture. Two weeks later, the condition of the limb being unchanged, a starch bandage was carefully applied over a well moulded case of heavy binder's board, and the patient put upon his crutches. The case for the thigh was so padded as to keep the fragments in almost perfect coaptation. After a fortnight had passed with no benefit, the case was removed daily, the leg bathed, and friction with electricity regularly applied for nearly two months. His appetite was pretty good. Quinine, iron in various forms, and the phosphate of lime were given, and long continued, but there was noticed no improvement in the leg. The fragments were quite movable, and the limb could be shortened and lengthened by manipulation to about an inch in extent. There was very little swelling at the place of the fracture, and no enlargement of the fractured ends.

Losing confidence for once in the *vis medicatrix nature*, I considered the various methods proposed for the cure of un-united fractures. The method by subcutaneous perforation proposed by Prof. D. Brainard of Chicago, seemed to me the most rational, and simple, the safest, and if not the surest, certainly giving great promise of success if carefully performed and persevered in. Prof. B. kindly mentioned to me, in a note, that he considered it a necessity for success, that the perforations should be repeated, at intervals of a week, until there was throbbing pain and some swelling about the fractured ends, persistent for some time after the perforation. This pain and swelling, he thinks, are almost certain to promise success.

On the 26th of March, I made three or four subcutaneous perforations of the fragments of the former, at the lower part of the fracture, carrying the instrument once between the fragments. I used a drill one-eighth of an inch wide. The external wound was closed by collodion and a compress retained over it by adhesive straps. The limb was dressed by a starched bandage over a well moulded case of binder's board, and laid upon a double inclined plane. No other extension was put upon the limb. Two days after, the starched-bandage was slit up, and the case sprung open enough to give a view of the limb at the point of operation. There was no sign of inflammation, and but slight soreness at the seat of the operation, and no persistent pain.

April 2.—One week after the first operation there was no soreness or swelling. At this time four or five perforations were made, some of them near the seat of the last, others above; one passed along the plane of the fracture between the fragments, all the others passed through both fragments. The limb was dressed as before. Rather more pain and soreness succeeded this operation than the former, but we feared that it was not sufficient to warrant us in discontinuing the perforations. Accordingly eight days (*April 10*) after the second operation I made four more perforations, two of which passed along the plane of the fracture, higher up and from without inwards. In making these two perforations, I experienced a sensation, communicated to my hand from the instrument, as if it were passing through soft cartilage, with numerous earthy granules scattered throughout it. This sensation was perfectly distinct from what I felt when the instrument hit the rough surfaces of the fragments. The limb was dressed as before, and the operation was followed by more pain and soreness

than before, with somewhat more swelling—all of which symptoms were more persistent than before. *April 16.*—I removed all the dressings, and found the limb an inch shorter than the other and quite inextensible; the fragments immovable with a considerable force. I reapplied the dressings, and gave my patient the liberty of the house and yard with his crutches. From that time his improvement was quite rapid, and within twelve weeks after the last operation he was able to walk about town without crutch or cane. The partial anchylosis of the knee which came on in the course of the treatment is gradually yielding under constant use.

VESICO-VAGINAL FISTULA—OPERATION—CURE.

By PLINY A. JEWETT, M.D.,

PROFESSOR OF OBSTETRICS IN THE YALE MEDICAL COLLEGE.

MRS. H., aged about 30 years, of a highly nervous temperament, had suffered severely in two previous labors, in both of which it was necessary to resort to the use of forceps. In her third labor she fell into the hands of an irregular practitioner (homoeopathic). Her labor was very protracted, the head of the child remaining impacted in the cavity of the pelvis for a period of *four days*. During this time she passed no urine; and, of course, the bladder must have been enormously distended. A few hours after the labor was finished the bladder gave away, and the urine passed off by the vagina in a gush. From that time no urine was passed by the urethra, but continued to dribble from the opening in the bladder. Upon an examination, between two and three months after the accident, an opening was found the size of a quarter of a dollar, nearly circular, but slightly oval, the long diameter being transverse. This opening was situated between the neck of the bladder and the uterus: the posterior boundary of the opening being the neck of the uterus. The bladder and the edge of the fistula were in a healthy condition. With the assistance of Drs. Beardsley and Pinney, of Birmingham, and Dr. Townsend of New Haven, I performed the operation advised by Dr. Sims. The patient was placed upon the bed in the position recommended by Dr. Sims. After she was fully under the influence of ether, the Sims' speculum was introduced, and the parts brought fully into view. The edges of the fistula were thoroughly excised with the long straight bistoury, and with great difficulty the mucous membrane of the neck of the uterus was removed at a point corresponding with the anterior edge of the fistula. As soon as the slight hemorrhage had ceased, the edges of a portion of the fistula were brought together with two *silver sutures*, and the remaining portion was attached directly to the neck of the uterus by carrying the needle into the substance of that organ. The sutures were applied without the clamps or shot, the wire being simply twisted upon itself. They were allowed to remain a period of twelve days. At that time they were removed, and perfect union was found to have taken place. The Sims' catheter was used and found to be invaluable. It answered the purpose intended most perfectly. The bowels were kept quiet by the administration of opium. One week after the removal of the sutures the bowels were moved by an injection. This was followed by a severe attack of cholera morbus, attended with severe vomiting and purging, which resulted in the detachment of that portion of the fistula attached to the neck of the uterus.

A few weeks after this accident the operation was repeated, and resulted in a perfect closure of the opening. The patient was kept under the moderate use of morphine after both operations. Two weeks after the removal of the sutures used in the second operation, the patient was able to pass her urine without the aid of the catheter. The sutures caused no irritation whatever, and were removed without difficulty. I have used the silver sutures in a great variety of operations for some time past, and have found them to answer the purpose intended better than any other. I have

used them in amputation of the extremities and of the female breast; in the extirpation of tumors; in operations upon the eyelids; in hare-lip; in wounds of the abdominal parietes; in the operation for phymosis; in lacerated perineum, etc., etc. I consider them a most valuable contribution to practical surgery.

NEW HAVEN, Nov. 12, 1880.

Reports of Hospitals.

BELLEVUE HOSPITAL.

SERVICE OF DR. I. E. TAYLOR.

CASE OF PRESENTATION OF THE RIGHT SCAPULA; ATTEMPTED VERSION BY EXTERNAL MANIPULATION; DELIVERY BY FORCEPS; CONVULSIONS; SUB-CUTANEOUS INJECTION OF MORPHIA; DEATH.

BRIDGET WEST, æt. 30 years, married, native of Ireland, admitted to the Lying-In Ward, May 31, 7½ A.M. Her complexion is rather pale, and there is marked œdema of the lower extremities. She is unable to see out of her left eye, and has not had the full use of her left leg for some time. The muscles of her left arm are partially paralysed, so that she carries it in a semiflexed position; the sensation, however, on the left side of the body is unimpaired. She says she has been in labor since six A.M. Examination per vaginam showed that dilatation of "the os" had set in; the soft parts were in good condition, the pains pretty good. The os was not fully dilated before four o'clock P.M.; she then had but a few bearing-down pains, when suddenly they ceased. Examination at this time, externally and per vaginam, led to the conclusion that the position was an unnatural one, but as there was no engagement of the fœtus, and as the bag of waters remained intact, the exact diagnosis could not be made. She continued in this condition, spent a good night, sleeping quietly until four A.M., when she had a return of her pains, which, however, were so slight that when Dr. Taylor was called in to see her, at half-past one o'clock, she was found walking about. Dr. Taylor upon examination made out the presentation to be the scapula. As the bag of waters was still intact Dr. Taylor deemed it best, first, to try external manipulation. Accordingly, several efforts were made to lift the head from the hypogastric region and bring it down. These proving of no avail, chloroform was administered, and several attempts again made. The head seemed to yield a little, but not enough to engage in the superior strait. Version by the internal method was therefore determined on. Whilst drawing her down to the foot of the bed she attempted to vomit, and simultaneously the bag of waters broke, and contractions set in. Dr. Taylor then introduced the right hand, and felt what he deemed to be a hand and foot. Here the introduction of the hand became pretty difficult from the contractions of the circular fibres of the uterus. The doctor brought down the child's left hand, the palm of which looked downwards and to the mother's right thigh. Carrying the right hand towards the fundus uteri, gradually, and during the intermissions of the uterine contractions, the left foot was first brought down, and the anæsthetic stopped. The delivery was difficult and rather tedious. At the time the head was born, the organ contracted so as to throw it out, together with the amniotic fluid, with considerable force. The child was still-born: long-continued pressure on the cord, when it was impossible to introduce the forceps, causing its death. Labor terminated at half-past four o'clock, and at five the woman was in a comfortable condition; uterus well contracted; no untoward symptom manifested itself. She remained in this condition not quite an hour, when she was seized with a convulsion. The uterus was well contracted, and the urine was found highly albuminous, scanty, and high colored. From this first convulsion she never entirely rallied. In about half an hour afterwards she had another. A note

was sent to Dr. Taylor stating the case, and he ordered cold to the head; enemata of soap suds and ol. ricini; and ant. tart. to be administered. The directions were carried out except the ant. tart. Bowels not moved by the injections.

June 2.—Convulsions recurred every hour or two during the night; pupils dilated, cups applied to nape of neck, followed by a blister, and pulvis purgans administered. Dr. Taylor saw patient at two o'clock P.M., when she had another convulsion. Urine again tested, and though a little more copious, was still highly albuminous. Three wet cups to each temple, and ol. tiglli gtt ½ every two hours till bowels moved; also, acid benzoic. 3 iss.; mucil. acac. ʒ ii. Dose, ʒ i. every four hours. 9 o'clock, P.M.—Patient in warm perspiration; pulse 122. First signs of returning consciousness; she now opens hereyes, and if stirred, says "stop;" pupils are contracted. 11 P.M.—Still perspires freely; breathing, which has to this time been rather stertorous, is easy; she has taken some chicken-broth, and lies quietly. June 3, 1 A.M.—Is now sleeping quietly—no stertor; continued thus up to 5 o'clock; bowels well moved, at this time; pulse 100, and soft. Treatment of Dr. T. still continued. Urine examined at 9 A.M.—Still albuminous, but less so than yesterday; amber colored. 3 P.M.—Patient apparently improving. June 4, 4 A.M.—Patient has slept well all night, since about 11 o'clock. 8 o'clock.—She is perfectly conscious; asks for something to eat; knows the nurse and attending physician, Dr. Taylor, and says she has no pain, except in her back. If her arm is moved, she says it hurts her; urine tested—still less albuminous.

Dr. Geo. T. Elliott saw patient at half-past one o'clock. Ordered a subcutaneous injection of gtt. x. Magendie's sol. morph. for the pain of which patient complained in the back, and pulv. Doveri gra. x. as an anodyne. These directions were carried out; at 8 P.M. patient conscious; pulse, soft, 92; breathing easy; skin moist and naturally warm. 10 P.M.—Patient restless; skin dry; pulse 100. 12 o'clock.—Eyes rolled back, profuse perspiration; face pale; right pupil contracted; pulse 120; respiration 35 per minute.

June 5, 2 A.M.—Breathing stertorous; rattle in throat; respiration labored, 40; pulse 160. Gave veratrum viride gtt. 3. 4 P.M.—Veratrum viride gtt. vj. Pulse 168; surface cold and perspiring. 5 o'clock.—Face livid; lips purple; surface getting cold. Death occurred at 8 o'clock.

Post-mortem Examination.—On opening the thorax the lungs were found healthy; heart a little fatty; liver congested, and a little fatty. Intestines distended with gas; serous coats healthy. Kidneys about normal size, fatty, and somewhat granular. Uterus not larger than normal; no external appearance of inflammatory character. Upon opening the organ, a laceration of the cervix, about two inches in length, reaching to the body of the uterus; through the mucous, and a portion of the muscular coats, the whole inner surface exhibited signs of the reparative process; and no pus, either in the uterine sinuses or in the Fallopian tubes, was seen. Ovaries in position, of natural size and color. The brain was found as follows:—Vessels over both hemispheres turgid with blood; slight subarachnoid effusion. On the upper posterior portions of the posterior lobes, there was found a subarachnoid clot (each clot about the size of a half-dollar), pressing slightly upon the substance of the brain. On section of the substance of the brain, no fluid was found in the ventricles. The optic thalamus, and the corpora quadrigemina of the right side, were decidedly softened.

TREATMENT OF DELIRIUM TREMENS BY LARGE DOSES OF TINCTURE OF DIGITALIS. REMOVAL OF A CANCEROUS MASS FROM A MAMMA, BY MEANS OF THE ECRASEUR.

SERVICE OF DR. STEPHEN SMITH.

[Reported by DR. RANDOLPH PAGE, M.D., House Surgeon.]

TWO CASES OF DELIRIUM TREMENS.

NOTICING in a late number of the *American Medical Times*, that delirium tremens had been treated successfully by

the Tincture of Digitalis, in $\frac{3}{4}$ ss. to $\frac{3}{4}$ j. doses, with the approbation of Dr. Smith, I tested the remedy in two well marked cases.

Case 1 was that of J. B., a German, 35 years of age—admitted to Bellevue Hospital Nov. 11th, with a small burn on his neck. At the time of admission he was "tremulous," and had some symptoms of "debauch." An emetico-cathartic was ordered, and sleep was enjoyed that night, but towards the evening of the next day, he grew delirious, and became so unmanageable that his "transfer to the cells" became necessary. Here he remained that night, getting nothing; but the next day, at ten o'clock, A.M., and every three hours after till half-past twelve that night, I gave him two drachms (3 ij.) of the official tinct. digitalis. From the administration of the second dose until he went to sleep, at half-past twelve, that night, he was quiet and docile; his pulse in the morning at ten was 108, and small; at ten P.M., pulse 98, this was brought down to 88, and the volume seemed to increase. At twelve, midnight, I gave him tinct. dig. 3 ij., which in fifteen minutes brought his pulse to 82; at half-past twelve, I gave him $\frac{3}{4}$ iss. of brandy; he went to sleep in less than five minutes, and slept all night, and till eleven next day. The effects that I observed were *diminution in number of the pulse, increase in volume, profuse diuresis*. Skin cool, without clamminess; delirium at first busy and boisterous, became less busy, but not muttering.

Case 2.—Mrs. Mc., Ireland, 48 years of age. Admitted to Bellevue for pretty severe contusions of face, and also on the body; a moderate drinker, according to her own statement—an old and confirmed *soaker*, according to the history given by her friends—she was several days in the ward before any delirium set in, and pretty much the same course was adopted in her case as in that of the German. She took 3 ij. digitalis—in two hours 3 ij. more, and went quietly to sleep, without any brandy. Her pulse was not above 95, nor below 80, at any time: so violent was she at first, that a strait-jacket was needed to keep her in bed. Both patients were discharged well, Nov. 19, 1860.

CANCEROUS-BREAST REMOVED BY THE ÉCRASEUR.

Mrs. C—, æt. 84, native of Ireland, married, was admitted in June, 1860, to this Hospital with a tumor in left mamma, of scirrhus character, which was removed with the knife by Dr. W. H. Church, the surgeon in attendance. At the time, Mrs. C. was nursing a child, and the vessels in the part were pretty large, and much blood was of necessity lost in the operation. The wound healed up by granulation in three weeks' time; but in August, the tumor re-appeared and grew so rapidly that she applied again for admission to Bellevue in October. On admission, she presented a huge mass of fungoid growth, very foul, and so vascular that the slightest prick on the surface would induce profuse hemorrhage. At the instance of Dr. Smith, I applied Simpson's paste (zinci sulph. and acid. sulph. made into a paste)—every second day, removing the debris with knife before applying the caustic a second time; this very sensibly diminished the size of the growth; but it grew so fast that it was deemed best to remove it at once—and to this end, Dr. Smith used the *écraseur*. (The base of the growth was about four inches in diameter.) By slow and steady turns, in an hour and a quarter's time, the mass was removed, with very slight hemorrhage. What was disposed to flow was speedily stopped by Dr. Squibb's excellent preparation of the "liquor ferri persulphat."

PAUPER INSANITY.—A return has been issued by the Poor-Law Board stating the number of paupers of unsound mind chargeable to the poor-rates on the 1st of January last in England and Wales. The number of paupers in receipt of relief was 850,896, and of these 31,543 were insane—namely, 22,378 lunatics, and 9165 idiots. In Wales half the whole number of the insane are idiots; but in the metropolis and the manufacturing districts the proportion of lunatics is larger and of idiots less.—*Medical News*.

Clinical Record.

UNIVERSITY MEDICAL COLLEGE.

PROFESSOR VALENTINE MOTT'S SURGICAL CLINIC.

Tuesday, November 20, 1860.

LEAD POISONING. ADENITIS. PERFORATION OF SEPTUM NASI. STRABISMUS CONVERGENS.

CASE I.—*Lead Poisoning*.—J. M., æt. 60, has paralysis and partial atrophy of the extensor muscles of the left fore-arm. The patient is a laborer, and as far as can be ascertained has not been exposed to the causes of Saturnine poisoning. He is a moderate beer drinker, and may have imbibed lead into his system in that way, as it is well known that that beverage is more or less impregnated with lead, which may either be put in intentionally, or may accidentally arise from the use of leaden vessels in the process of manufacture. The effects of lead on the system are very curious and unaccountable. After the system has become somewhat subject to its influence a phenomenon known as lead colic shows itself. This is a very severe and distressing form of colic, which sometimes appears in several successive attacks. It has been called painter's colic, or *colica pictorum*, from the fact of persons of that craft being more subject to it from their exposure to the influence of lead. Its most singular feature, however, is that presented in the patient before us, paralysis of the muscles of the dorsum of the fore-arm, and consequent inability to extend the hand at the carpal joint. Why lead should produce paralysis, or why it should choose that particular set of muscles to exhibit its peculiar effects, I am unable to explain, and will leave it to the investigations of some of my young hearers to discover, and, at some future day, demonstrate to the world. The indication of treatment here is local and general. Locally rest and friction should be employed; the forearm and hand should have a splint so adapted as to support the hand, and thus give rest to the affected muscles; or a glove may be applied to the hand, and a strap from the dorsum carried up the forearm, and there fastened so as to afford the necessary support to the hand, and at the same time allow the use of the fingers. Friction with or without some stimulating liniment should be daily resorted to with a view to excite action in the muscles. The general treatment should extend to careful attention to the whole general health. Of late years the iodide of potassium has come into very fashionable use, and in no disease is it more serviceable than in this. It acts chemically upon the lead through the blood, and eliminates the lead gradually from the system. Let this good man take iod. pot. gr. v. three times a day.

"My good man," said the Professor, patting the patient upon the back, "can you use your left hand at all?" "No, sir." "Couldn't you take a dollar with it if offered to you?" "No, sir; but I could take it with the other hand though!" "Well, well," responded the Professor encouragingly, "we can always find out very quickly how to use our hands in taking money." It should be remarked that a valuable diagnostic sign in lead poisoning is one brought before the profession by Dr. Barton: it is the appearance of a blue line along the margins of the gums. This is very peculiar and well marked, and when once seen cannot afterwards be mistaken.

CASE II.—*Adenitis*.—R. N., æt. 30. Several months ago without obvious cause an indurated swelling of the cervical glands of the right side appeared. There is now a mass of these glands running from the angle of the jaw to the clavicle. This, gentlemen, though a very common, is an interesting case. In your dissections, where these glands are healthy, you will have to look very sharp to find them, and yet they often take on this morbid growth, frequently attaining an enormous size. When I was in Italy I visited with a feeling of profound reverence the residence of the great Mascagni, whose great work on the lymphatic system

is a distinguished honor to the profession. In investigating the cause of the affections of the lymphatic system I can generally go about as far as my neighbors, but here I have to come to a full stop. Some of our young brethren, though, can very readily jump over a period, and frolic on the other side, and in some scientific gambols of this kind we are often called upon to admire wisdom which we cannot understand. We will treat this case with iodine. Internally we will give six drops of Lugol's solution, as that is cheaper for poor folks than iod. pot., and is perhaps just as good. Locally we will paint the parts with tinct. iodine. This, gentlemen, is an excellent application, and besides it's fashionable. You may be particular about the cut of your coat, or the style of your beard, but if you are not fashionable in your prescriptions you will be denounced as an 'old fogey.'

CASE III.—Perforation of Septum Nasi.—M. E., æt. 29. Two years ago an irritation in the left nostril excited a desire to pick the offending organ; a small sore formed in consequence, which soon scabbed over; this scab was picked off, and being succeeded by another, it was likewise removed, until the septum of the nose had been eroded through, and a passage existed between the two nasal passages. Now, gentlemen, there is no good reason why one should not indulge in picking his own nose if so disposed, but it should be practised in moderation, or there is danger, as you see in the case of this good lady, of picking a hole in the member. I have seen several similar cases. Nothing can be done for it—the hole will do no harm and will get no worse, if the lady will only refrain from picking it in future.

CASE IV.—Strabismus Convergens.—Girl æt. 6 years. Has a decided squint of the left eye. This affection, as you know, is the most common variety, as the internal rectus muscle is much more liable to be contracted than the external rectus. The treatment is dependent entirely upon operation. The operation is simple, but requires care and skill; it requires a good light, and the light of science. More than one eye has been destroyed by the performance of the section of the internal rectus muscle. With these prefatory remarks, the patient was put under the influence of chloroform. The lids being separated with a spring wire speculum, the globe of the eye was steadied by an assistant, and Dr. A. B. Mott, the Prosecutor, pinching up the conjunctiva about two lines from the cornea, divided it with scissors, making a small perpendicular slit, and then hooking out the end of the muscle near its insertion, by means of the blunt hook, snipped it across; then made sure with the hook that no part of the muscle was left undivided, and the operation was completed. Another case of strabismus of the right eye was then introduced and operated on in like manner.

PROF. A. C. POST'S CLINIC.

November 15, 1860.

ABSCESS IN PERINEO. TRAUMATIC CATARACT. UNUNITED FRACTURE OF THIGH. ENCYSTED TUMOR IN THE LOBE OF THE EAR. VARICOSE VEINS OF THE LEG. WOUND OF THUMB.

CASE IX.—Abscess in Perineo.—P. McD., æt. 23. The patient now before you, gentlemen, has an inflammatory swelling in the perineum, extending into the scrotum. The left side of the swelling is hard, the right side is soft and fluctuating, indicating a collection of purulent fluid. Abscesses in this situation are usually the result of urinary infiltration, which is a secondary consequence of stricture. In severe cases of stricture, the urethra sometimes gives way suddenly, behind the contracted portion, and urine is infiltrated into the cellular tissue of the perineum and scrotum, causing a low degree of inflammation, speedily terminating in mortification, occasioning extensive destruction of the tissues, and often leading to a fatal result. In other cases of stricture a minute perforation of the urethra takes place by ulceration, and a few drops of urine escape into

the cellular tissue, leading to the formation of an abscess. When such an abscess is opened, the matter which is evacuated often has an odor of urine. Abscesses of this kind should be freely opened, and afterwards the stricture should be dilated by means of bougies. This patient had gonorrhoea about five years ago. For the last two or three years he has had some difficulty in urinating. Two years ago he was in the New York Hospital, where instruments were introduced for the purpose of dilating the stricture, since which time he has passed his urine with less difficulty. I will now open the abscess, and will postpone the treatment of the stricture until the swelling of the perineum shall have subsided. (A bistoury was then introduced into the abscess, and the pus evacuated. No urinary odor was detected. The patient was directed to apply yeast poultice.)

CASE X.—Traumatic Cataract, with Contraction and Distortion of Pupil resulting from Injury.—H. C., æt. 18. Gentlemen, you may remember having seen this patient here several weeks ago. He had then recently received an injury in his eye from a fragment of steel, which had penetrated the cornea, and had wounded the iris and the capsule of the lens. The iris was prolapsed through the wound of the cornea, and there was an opacity of the crystalline lens. The cornea and sclerotica were inflamed. The patient had taken mercurial remedies, which had occasioned moderate pytalism. I then directed the use of iodide of potassium, five grains three times a day, with a blister behind his ear, and strips of isinglass plaster passed from the upper to the lower end to keep the eye closed. The inflammation has now subsided. There is an opaque cicatrix of the cornea to which the margin of the pupil is adherent: the pupil is consequently distorted and nearly closed, and the lens is opaque. If this patient should by any accident lose his other eye, the sight of this one might possibly be restored by an operation for artificial pupil, and by division of the cataract.

CASE XI.—Ununited Fracture of the Thigh.—T. M., æt. 19. During the last winter this patient was riding down hill on a sleigh, and came into forcible collision with a stationary cart, fracturing his thigh and arm. Reunion took place promptly in the arm, but the fragments of the os femoris have remained ununited, overlapping each other so as to shorten the limb to the extent of four inches. Non-union of fractured bones may be the result of either constitutional or local causes, or of both combined. Among the constitutional causes the most prominent are debility arising from advanced age, organic disease, intemperance, or an insufficient supply of nutritious food. Another cause which sometimes prevents the reparation of a fracture is the concentration of the vital energies upon another organ, as in pregnancy and lactation. There are three local causes of non-union: 1. Want of rest. 2. Want of apposition of the fragments. 3. Interposition of some substance between the fragments. In a simple fracture the interposed substance may be a third fragment of bone deprived of its vital connexions, or it may be a portion of muscle or of fibrous tissue. In a compound fracture it may be a foreign substance introduced from without. In the present instance non-union may be attributed, in part at least, to the existence of another fracture, diverting the energies of the system. There may, perhaps, have been also a want of perfect rest, and of proper apposition of the fragments. In the treatment of ununited fracture, when the case is recent, and there has been some attempt at the reparation of the injury, union may sometimes be brought about by careful apposition and rest, secured by appropriate splints and bandages, together with suitable constitutional treatment adapted to the circumstances of the patient. But when many months have elapsed, and there is great mobility between the fragments, union cannot ordinarily be obtained without resorting to some operative procedure. Three operations may be resorted to for this purpose: 1st. Drilling the fragments in different directions, as recommended by Dr. Brainard of Chicago. 2d. Passing a seton between the fragments as endorsed by Dr. Physick. 3d. Sawing off

the ends of the fragments, and wiring them together, as recommended by Dr. J. Kearny Rodgers. The last method is the one I consider as the best adapted to the present case. Whenever the patient is prepared to undergo the operation I will be ready to perform it. The operation is a severe one, but its result is generally satisfactory.

CASE XII.—Encysted Tumor in the Lobe of the Right Ear.—T. B., set. 28. This patient has a steatomatous tumor of a globular form in the lobe of his right ear. It is about an inch in diameter. It moves freely between the two layers of integument which bound it before and behind. It has existed for several years. A tumor of this character may be readily distinguished from a malignant tumor by its mobility, by the absence of pain, and by its smooth surface. The most convenient mode of removing such tumors is that recommended by Dr. J. Kearny Rodgers, viz. bisecting them, and then dissecting out the cyst. (The Professor then proceeded to remove the tumor by the method above indicated. Three fine sutures were employed in bringing the edges of the wound together.)

CASE XIII.—Varicose Veins of Leg.—Bridget M., set. 27. This young woman has been suffering for a long time, first, from a varicose condition of the veins of her leg, affecting chiefly the external saphena and its branches. There is no ulceration nor excoriation of the integument; but the patient suffers from a sense of weight and pain in the limb. Varicose veins are often a source of very serious inconvenience to patients who are affected with them. They often lead to troublesome ulceration or excoriation of the integuments, and sometimes to alarming hemorrhages, as the distended state of the veins renders the valves insufficient to take off the pressure of the superincumbent column of blood. The treatment of varicose veins is palliative or radical. The radical treatment consists in obliteration of the diseased vessels, and the process is always attended with more or less danger to life; it should therefore be reserved for aggravated cases. The palliative treatment consists in giving a uniform support to the limb by means of bandages, or of elastic or laced stockings. The common roller bandage will fulfil the indication, if carefully applied. But the application requires to be often repeated, and the bandage is apt to become loose when the patient takes exercise. The elastic or laced stocking is more reliable. I prefer a well made laced stocking, and I recommend this patient to obtain one.

CASE XIV.—Varicose Veins of Leg.—Ann E., set. 29. This woman has also a varicose state of the veins of her leg, but it is much more recent, being the result of the pressure of the impregnated uterus upon the iliac veins. She has an infant two weeks old. As the cause which produced the disease has ceased to act, I am in hopes that, under careful management, the disease will subside. I recommend the application of a roller bandage, and advise the patient to keep her limbs as much as possible in a horizontal posture.

CASE XV.—Inflammation following Contused Wound of Thumb.—M. C., set. 30. The right thumb of this patient was bitten by a man four weeks ago. The injury was inflicted upon the posterior part of the first phalanx. I saw the patient at my office the day before yesterday, and found the tissues on the posterior part of the thumb in a state of high inflammation, with suppuration. There was an ulcerated opening through which the matter was imperfectly discharged. I enlarged the opening by free incisions, and directed the application of emollient poultices. I find to-day that there has been a remarkable subsidence of the inflammation. When the fibrous tissues are involved in inflammation, no other remedy will afford such prompt and effectual relief as free incisions. I would recommend this patient to continue the application of poultices two days longer, and then to dress the sore with lint spread with basilicon ointment. Emollient poultices are very useful applications in the early stage of suppuration, but if these are continued too long, they produce too much relaxation, and thus hinder the reparative process.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROF. PARKER AND MARKOE'S CLINIC.

November. 12, 1900.

CONGENITAL HARELIP AND FISSURE OF PALATE. NECROSIS OF MAXILLA INFERIOR.

CASE IX.—Congenital Harelip and Fissure of the Palate.—The patient is an infant, set. 5 months. The harelip is double, the lip being divided on each side of the median line, and there is also a deficiency in the structures of the roof of the mouth, constituting that condition which is known as fissure of the palate. Harelip is usually single; sometimes it is double, with a segment of perfect tissues between the two clefts; again, as in the present case, there is one wide fissure, partially divided at its base by a rudimentary process, which is the analogue of the intermaxillary bones of the lower animals. In such a condition of the parts, suction is impossible, because the lips cannot be closed in such a way as to produce a vacuum within the mouth. Such children can only be brought up by hand. The fissure of the palate is irremediable; but the external deformity can be removed by the ordinary operation for harelip. The intermaxillary process is principally connected with the septum nasi, and can easily be removed. The time for operating in these cases depends upon various circumstances. If the harelip is single, and the operation is performed early, the child is soon able to suck; but if there is a deficiency of the palate, no such result can be expected. It is, however, a fact, that if, in these cases, an operation is performed at an early period, the edges of the palate fissure will be very much approximated. In this case, the operation should be performed before the eruption of the teeth.

CASE X.—Necrosis of the Inferior Maxilla.—Sophia B., set. 15, was operated upon, eight years ago, for the removal of a portion of dead bone from the angle of the inferior maxilla, upon the left side. The trouble commenced three years before the operation, with pain, and much swelling of the surrounding parts, which finally suppurated, leaving openings leading down to the bone; and there was a constant discharge for many months. The exfoliated bone was removed from within the mouth, and was followed by a rapid healing, leaving a slight deformity at the angle of the jaw, a feeling of roughness to the bone, and a total inability to use the jaw for the mastication of her food. She has never worked in a match-factory, nor been exposed to the fumes of phosphorus.

Remarks.—This is a very disagreeable and unsatisfactory case to treat. From the history she has given, we are led to infer that the periosteum has been the seat of an active inflammation, which has produced the death of a portion of the jaw, and extending, for a period of three years, to the surrounding fibrous tissues, has caused contractions and adhesions, which, in their turn, after eight years of disuse, have occasioned general atrophy of the bone, as well as of the soft parts. If this condition had followed a large abscess in this region, we might hope to overcome it by the daily introduction of a plug of soft wood between the teeth. In this case, however, from the nature of the disease, the forcible separation of the jaws would be attended with great danger; but as the whole circumference of the bone has not been involved, the case may not be as bad as it appears, and the use of the plug may be found justifiable. It should be made, at first, with soft wood, and should be suffered to remain in position for an hour each day; it should gradually be enlarged, and after a time made of hard wood. There is no necessity for the division of any muscles.

NEGRO HOSPITAL.—Messrs. Chisolm and Cain, of Charleston, S.C., have erected a large and commodious hospital for slaves.

American Medical Times.

SATURDAY, DECEMBER 1, 1860.

EXORBITANT CHARGES OF APOTHECARIES.

THE communication under the above caption published in the number of Nov. 10, elicited a reply which was crowded out of the two last numbers, but appears in the present. The good tone and object of both of these writers render their communications particularly appropriate and acceptable, and suggest a few additional remarks in this place.

It is undoubtedly true that the charges of some pharmacutists are exorbitant, and that these charges have a bad effect in many ways; and they are not unfrequently based upon false allegations, which give peculiar emphasis and effect to the injury done. For instance, upon two occasions lately, different pharmacutists charged, in one case sixty-two cents for two drachms, and in the other, fifty cents for an ounce of chloroform, the chloroform required being specified to be of a particular manufacture that was supposed to insure its strictly official character only. In both cases the charges were defended upon the ground of exorbitant prices of the manufacturer, with the remark, that so long as physicians insisted upon ordering such "fancy" articles their patients must suffer. The first of these charges was truly exorbitant, and the second one-fourth or one-fifth too high, but the injury done was far greater than that by the high charges. As is not unusual in such cases, both these circumstances came directly to the physicians who had ordered, and the effect upon both was similar, natural, and forcible, and was precisely that suggested by the correspondent of this number. They would neither of them ever send to those stores again, or rather they would always make a point of sending elsewhere. That the charges of pharmacutists have often no relation to the cost of material and labor of putting together, is true; and it is a matter of some surprise that an educated, intelligent physician should not recognise the justice of such charges when made by educated and skilful pharmacutists, and within the limits of that liberal moderation which should be the premium offered for intellect, education, and skill, where these are so pre-eminently necessary as in medicine and pharmacy. Attainments through education, experience, industry, and skill, when supported upon a basis of long and well-established reputation for reliability, and honesty of purpose, must be, and should be, well and liberally paid; and it is as singularly fatal error in any profession, or community, to oppose or withhold this or any other stimulant which has so direct and palpable an effect in fostering skill and integrity. To discriminate closely among men is, therefore, the first duty of the physician in this respect, and then to offer all legitimate support to those who deserve it. If in this connexion we may state that we have long and anxiously looked forward to the time—and this is now predicted as the natural reformation which must occur—when a class of pharmaceutical offices will be inaugurated, at first only one or two perhaps, and these only in the largest cities. These should be small unattractive offices, fitted up with closets instead of

open shelves, because most medicinal substances are more or less injured by light, and furnished with every convenience for compounding, preparing, and dispensing medicines, where every galenical, and many of the more simple chemical preparations, should be actually made. All proprietary and patent medicines, and all fancy articles, should be excluded, and, in short, nothing be admitted which does not appertain legitimately and exclusively to the sick chamber. What a contrast would be presented in such an office to any of the present stores where prescriptions are put up! The character of the fitting up, and the variety and incongruity of the present stores, appear to bear relation only to the pecuniary abilities of those who set them up; and the enormous expenditure has a much more intimate relation to the costly elegances of the show-case contents, than to the contents of the little phalanx of small and often shabby bottles which occupy some four feet square nook or corner for prescription use. In degenerating from its high and legitimate calling, the pharmacy of the present day has, step by step, invaded the territory of its legitimate next-door neighbor, and nearest friend, medicine, and has thus become the indispensable agent of the quack and nostrum-monger. From this starting-point pharmacy has gone both up and down the street, subsidizing its neighbors on all hands, with apparently the same discrimination which governs the succession of trades in a public thoroughfare. The instrument maker, stationer, perfumer, comb and brush maker, the barber's shop, the cigar shop, the candy shop, and lately, worst of all, the drinking shop, have been invaded and their functions appropriated, so that instead of the simple inscription of Pharmaceutical Office, as above suggested, the pharmacy of to-day might add to the tautology of its present door-plate "and vender of merchandise in general." As pharmacutists have an undisputed right to sell what they please within the limits of enforced law, so physicians have a similar right to buy where they please, and this right extends over the medicines they use in the treatment of their cases. A medical man has as much and as natural a right to choose what pharmacist shall put up his prescriptions, as he has to indicate the ratio in which his medicines shall be compounded, the hours at which they should be taken, or the locality in which his patients should or should not reside—that is, the right to exercise his judgment authoritatively whenever that judgment is required at his hands; and there is no probability that a physician whose reputation is based upon skill and integrity will ever be injuriously suspected of connivance with any pharmacist of similar character in any kind or degree of extortion, or sharing of profits. There is a large number of medical men and pharmacutists accessible, who are not at all injured by any such unjust suspicions; and, to judge from the intelligence and general tone of the articles, both the correspondents upon this subject belong to that class, and therefore deserve to support each other. Persons or families who may be driven into homoeopathy merely by the argument that their medicines cost less, or who might be influenced in their choice by exorbitant charges for medicines, would be likely to be easily dislodged either from homoeopathy or anything else upon a basis of no tangible results. As may be seen in the conclusion of the article published in this number, the suggested alternative of physicians carrying their own medicines might render

them liable to injurious imputations, whilst its practical general application would result in handing pharmacy over bodily to "hock and soda," and cigars, and in handing medical men bodily over to the wholesale druggist, who is exclusively a merchant, and knows no standard but dollars and cents.

THE WEEK.

THE ACADEMY OF MEDICINE has repeatedly and in various ways demonstrated the utility and importance of its organization, but never is this more satisfactorily accomplished than when its working members—the busy practitioners—bring before their associates, at a stated meeting, a plain statement of some instructive observations in their daily practice, or a faithful resumé of facts relating to any practical question in medicine. This was done at the last meeting. A well recorded case of Prolapsus of the Funis; an admirable and brief review of Craniotomy; a happily written paper upon the Hygiene of the Sewing-machine, and an exhibition of a new and valuable Deodorant, occupied the evening. A clear demonstration of the practical value of Dr. Thomas's plan of *postural* management in cases of prolapse of the funis, and nice practical points in such management; the presentation of a most valuable improvement in the Perforator, and plain suggestions upon the subject of cephalotomy; and, in reference to the sewing-machine, Hood, himself, could not have said more; albeit, we do not agree with Dr. Gardener in the opinion that the use of this instrument is not in some instances a cause of certain menstrual and uterine diseases. In the last number of the MEDICAL TIMES we said some plain things respecting the Academy, but there is much more to be said to the credit than to the discredit of that body; and if its members will heartily engage in such efforts as have characterized the varied and excellent productions of their President, and a few others in that body, it would actually become the most useful and influential of any local association of the kind in the world; and it will be fortunate for the Academy if its next President as worthily represents the learning, dignity, and virtues of the profession, and is as widely and favorably known to the medical world. We say *widely and favorably known*, because the Academy now has a commanding position which it can only maintain by elevating to its highest office members of acknowledged reputation. The suggestion we made last week respecting the relative duties and design of the Academy and the County Medical Society, we believe to be important. The County Society cannot, without dereliction of bounden duty to the State, and to the State Medical Society, throw upon the Academy the sacred obligations which legislative statutes and the rules of the parent society have imposed on the general organization of the *legally authorized* physicians in the country. Upon the subject of County Medical Societies, our readers will hear from us again; and as there has recently been much discussion upon the question of the rights and obligations of the Medical Profession under the *existing* statutes of this State, and as our brethren need to act unitedly and in earnest in fulfilling their obligations, and claiming their privileges under such statutes, we cordially invite the correspondence and co-operation of friends who have carefully considered this subject.

It is a faithful saying, that "he who speaks a language that he does not understand, speaks nonsense." This adage is now almost daily illustrated by that remarkable agglomeration of theology, politics, physic, etc., *The World*. If its writers are as little familiar with the progress of the world in other departments as in the medical sciences, *The World* should circulate exclusively among antiquarians. Here is a curious relic which it has fished out of the mire of an ancient and obsolete physiology:

"NERVOUS ACTIVITY.—At the last meeting of the Medico-Chirurgical Society of this city, Dr. O'Reilly described a case in which a man received a kick on his head from a horse, which carried away a portion of his brain, notwithstanding which he recovered, his mind not being apparently affected. This was attributed to the fact that the pineal gland was not wounded or pressed. Many similar facts are on record."

Another case of slow poisoning has just come to light in Bergen, N. J., the victim, as usual, being the wife of the criminal. The coroner's inquest discloses the fact, that the deceased had been suffering from gastric irritation, for which her physician, Dr. Booth, prescribed anodynes, which at first relieved, but afterwards so aggravated her sufferings, that she was thrown into convulsions, of which she died. The evidence against the husband was very strong, as he had threatened her life; he was apprehensive that poisons would be found in the stomach after death, and alleged that his wife took them to produce abortion. The stomach was submitted to investigation by Prof. DOREMUS, who, after a patient examination, found sufficient evidences of death by poison to go before the jury, and state that such was his conclusion. The jury rendered a verdict accordingly, and the poisoner, William Absom, was thereupon committed to jail to await the action of the grand jury.

We have at length an answer to the question which has been so long and so frequently asked, "Who shall decide when Doctors disagree?" *The World* has assumed the dignified and responsible position of the umpire of the medical profession, and to it we may hereafter refer all doubtful medical questions, with the certainty that they will be "fixed up" to the satisfaction of at least one of the parties concerned. The latest good office of that paper is in determining the question of priority in the treatment of hip-joint disease by apparatus, about which the profession has had such confused opinions. In a late number, it thus sets the matter at rest for ever: "DR. H. G. DAVIS, A PHYSICIAN OF THIS CITY, IS THE AUTHOR OF THIS DISCOVERY." We hope no one will raise the question, "If Dr. Davis is the author of the discovery, who is the Discoverer?"

A COMMISSION of Lunacy is a necessity of every State. Will our brethren in the State of New York give their attention to this subject, and take the time to confer with the legislators elect in their respective districts? For the proper institution and character of such a commission our profession must be held responsible.

Reviews.

(Continued from page 372.)

CHEMISTRY IN ITS RELATIONS TO PHYSIOLOGY AND MEDICINE. By GEORGE E. DAY, M.A. CANT., M.D., F.R.S., Professor of Medicine in the University of St. Andrews. With Plates and Illustrations. London. Hippolyte Baillière; New York, Baillière Brothers. 1860. 8vo. pp. 527.

ONLY six years ago Prof. Lehmann wrote, "We are still so far behind in the theory of nutrition, that we must content ourselves with investigating the balances between the recepta and excreta in order to form even the outlines of a representation of the tissue-metamorphoses in general." And he continues, "We must look to the future for an investigation of the internal exchange of elements in the process of nutrition, of its individual members and stages, of the so-called tissue-metamorphoses, in order to obtain an exact scientific comprehension of the chemical phenomena of life." Replete with interest, and being "the culminating point or final object of all physiologico-chemical investigations," this subject is worthy the attention bestowed upon it in Dr. Day's Manual.

We are pleased to observe his discrimination of the practical value and significance of the experiments of Bidder and Schmidt, Bernard, Vierordt, and Dr. Hammond. The reader, instead of being misguided by partial statements and the admission of unsubstantiated conclusions, is made to see what is established by experiment and experience, and what is necessarily hypothetical and unsettled. These chapters are enriched by many incidental allusions to those questions which are of peculiar interest to the practical physician, and his opinions are given very concisely and clearly. For example—after referring to the solvent power of the gastric juice, and to the common idea that the mere vital force inherent in the stomach prevents its digestion by its own secretion, he adduces the recent experiments of Pavy and Bernard, in which the flesh of *living* animals was readily dissolved by inserting their extremities in the fistulous stomach of a dog; and says, "the resisting power of the stomach seems due to the *continuous formation of epithelium* during the process of digestion."

The results of Dr. Hammond's inquiries are given a prominent place in the chapters on Nutrition and the Urine, and it is in connexion with the experiments and opinions of other inquiries upon these subjects that the value of Dr. Hammond's elaborate investigations fully appears. Dr. Day says very truly that, "a series of accurate experiments on the *proportion* in which the four great nutrient groups should be combined so as to form the food best suited to the general want of the organism, is still a *desideratum*."

And he further says, "that there is no single *fixed* proportion of the four groups suitable for all conditions of life, even in the same individual." But, in reference to this point, he gives the following very recent conclusions of Vierordt; that to keep an adult man in good condition, there must be taken and digested, daily,

Albuminous matters, about	4 oz.
Fatty substances (fat), "	3 oz.
Amylaceous food, "	10½ oz.
Salts (extra),	1 oz.

And in the same period the human system requires about eighty-four ounces of water, and in respiration twenty-three ounces of oxygen.

In reference to the digestion of fatty substances and the relations of the hepatic and pancreatic secretions to that process, we observe that Dr. Day inclines to the opinion that it is mainly by the former and not by the latter secretion that fatty food is prepared for assimilation. He does not directly confute the conclusions of Bernard and Dalton, but he adduces the experiments of Frerichs, Lenz, Lehmann, Bidder, and Schmidt, and says:

"They seem to afford conclusive evidence that a similar result does not take place in the intestinal canal," (i.e. an emulsion of the fat with the pancreatic fluid), "and," he continues, "it is most probable that it is in consequence of its admixture with the acid gastric juice that the pancreatic fluid loses this property. In support of the view held by Bernard's opponents it may be further urged that the chyle always contains a far larger amount of the neutral fats than of fatty acids, and that after the establishment of a fistulous opening which allows of the external escape of the pancreatic fluid, the fat taken with the food seems to be absorbed as readily and completely as before the operation."

Our author appears to doubt the correctness of Bernard's assertion that the opponents of his views have erred in consequence of their imperfect anatomical knowledge, yet he does that distinguished physiologist the justice to note that assertion. Now as we have repeatedly seen the demonstration of Bernard's statement respecting double outlets of the pancreatic secretion into the intestine, and from the elaborate experimental tests of Prof. Dalton have witnessed a more conclusive demonstration of the agencies and probable processes in the digestion of fatty substances than were instituted by the authorities upon whom Dr. Day relies in this matter, we must adopt the views of Bernard and Dalton on this subject. We need not dwell upon this; but before turning to another division of the treatise, we would refer to the author's statement that *curarine* becomes changed in the digestive cavity so that it loses its poisonous properties. Otherwise, says he, it would be as poisonous when taken into the stomach as when introduced directly into the blood. Some of the facts relating to this subject are yet unexplained, but the actual experiment of introducing large quantities of the curara into the dog's stomach through a fistulous opening, and after a time withdrawing some of the pulpy fluids from the stomach and inserting a small portion under the cutis of another animal in health and then witnessing the prompt and fatal effect of that poison, as it has often been performed by Prof. Dalton of this city, shows that Dr. Day has drawn an incorrect inference upon this point, so far as relates to any change effected upon this particular poison by the gastric juice.

But it is difficult to find many statements in this admirable volume that invite criticism. It is incomparably the most faultless and the best arranged compendium of vital chemistry that has yet appeared in the English language. We have recommended it to our advanced students, and we unhesitatingly commend it to our professional brethren as the treatise best adapted to the practical necessities of medical men.

As the volume should be placed in every physician's library, our readers will excuse us from entering upon a special review of its elaborate chapters upon the blood, the secretions, the metamorphoses of tissues, the respiration, etc. We need only to remark that those subjects occupy

the greater portion of the volume, and constitute its really attractive features for the mass of readers. We quote a few paragraphs by way of illustration of the author's happy and accurate method of treating every question in those chapters:—

"The blood-corpuscles must be regarded as cells having special contents, and their activity of metamorphosis must vary with the nature of the fluid in which they are suspended (the plasma). The actual metamorphoses that result from the reciprocal action of the cells and the plasma are not however yet accurately known. . . .

"The blood-corpuscles, like all other vital cells, doubtless have a definite period of existence, although we do not know what that period is, and the mode and process of their disintegration are equally unknown to us. We know this much, however, that the cells of the same blood vary in the length of time during which they can resist destructive chemical agents, and hence it is conjectured that the cells that first give way are the old ones."

Again speaking of the uses of fat in the nutritive metamorphoses, after alluding to the ingenious theory of Persoz and Boussingault respecting cell-formation by means of fat vesicles and albuminoid coverings, the author says:—

"We are not prepared fully to support this apparently simple explanation of the origin of a cell; but this at least is certain, that fat is always to be found in all highly cellular organs (as, for example, the brain and liver), and in all tissues during the process of their development; pus and certain cancerous growths are rich in fat; the hair-bulbs present an active formation of new cells, and we find them imbedded in the sebaceous glands; the chyle, which always abounds in cells in various stages of formation, always contains much fat; the germ in the eggs is surrounded by the fatty yolk-fluid; and numerous fat-globules are found in the muscular and other foetal tissues."

The study of physiological chemistry having become indispensable in medical education, and, with anatomy, constituting not only the very elements of histological science but the true basis of accurate pathology, the faithful teacher and the busy practitioner may alike congratulate themselves upon the possession of Dr. Day's new book. It is the most complete, compendious, accurate, and practically suggestive of any treatise of the kind. Its arrangement is right, and the illustrations (mostly from Funke's Atlas) are finely engraved, and sufficiently numerous. The sections treating of Respiration, the Metamorphoses, the Blood, and the Urine, are replete with practical suggestions, and every page of the volume affords evidence of thorough familiarity with all the great truths of vital chemistry, and bears the impress of a sound practical mind fully informed upon every question in physiology and practice. Indeed it is the crowning excellence of this treatise that it is the production of a practical physician who is acknowledged to have no superiors in the extent and accuracy of mere chemical and physiological knowledge, while as a philosophical physician he had no other object in view than the production of a compendious manual that should attractively teach and illustrate the applications of "Chemistry in its Relations to Physiology and Medicine." Thus the title of the volume is the most perfect definition of its contents.

THE HAHNEMANN MEDICAL COLLEGE, of Chicago, commenced its session with three students, and as these wanted their tickets on credit, the course of lectures did not proceed beyond the introductory.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Oct. 24, 1888.

JNO. WATSON, M.D., President in the Chair.

DISCUSSION ON THE USE OF PESSARIES.

In accordance with the resolution passed at a previous meeting, the discussion upon the treatment of uterine diseases by mechanical appliances was in order.*

Dr. E. R. PRASLEE opened the discussion as follows:—The three principal important questions which arise in connexion with this subject are:—I. Are such appliances ever necessary? II. In what cases are they called for? and III. What are the best instruments for such purposes?

I. In order to be definitely understood in reference to the various mechanical appliances in the treatment of uterine affections, I shall confine myself to the instruments applied *per vaginam*; for although the instruments called utero-abdominal supporters may support the muscles of the abdomen, they can never either reduce a displaced uterus or retain it in place if it be reduced. This is no more possible than it would be to retain any solid body in a definite position in a barrel of water by applying an extra hoop on the outside.

Some maintain that the uterus has no determined position or relation to the other organs of the pelvis, and that, therefore, whether the fundus falls forwards, backwards, or laterally, or is maintained more nearly erect, it is a matter of no importance. Such, of course, object to the use of instruments altogether, inasmuch as to them, for all practical purposes, no such thing as a uterine displacement exists. It is, however, the fact that the uterus, like the bladder, rectum, and kidneys, has its own normal position, the difference being that it is naturally more movable than some of the other organs. In giving my opinion as to the necessity of this class of instruments, I would no sooner dispense with the use of mechanical appliances in the treatment of all cases of displacements of the uterus, than I would dispense with the use of splints in the treatment of a majority of cases of fracture.

II. The cases in which pessaries are found useful, are those displacements anteriorly, posteriorly, or downwards, in other words, cases of anteversion, anteversion, retroversion or retroflexion, and prolapsus. In some cases of prolapsus in the first degree, entire relief is instantaneously afforded by the application of this instrument. I allude to those cases where the woman is standing, and where the uterus is elevated upon the tip of the finger even a quarter of an inch, and the unpleasant symptoms disappear, but on withdrawal of the support the suffering returns. Inversion may require the use of the pessary, but, as a general rule, not until the uterus is completely repositioned. Do not understand me to say that all cases of either of these kinds of displacement require the use of the instrument under consideration; I only say that cases occur of each, which I could not conscientiously treat without it. There are cases which give no symptoms at all, and therefore require no treatment whatever. Some of these, however, finally produce serious constitutional symptoms, and for this reason, at length, require treatment of some kind. Some also produce sterility, and require treatment with the object of remedying that condition. There are many cases also which may be treated by astringent applications in the recumbent position, others still in which the displacement is due to inflammation and congestion of the uterus, and which may, therefore, merely require that these conditions, by the appropriate treatment, be removed. Still, there remains a class of cases, as I have before stated, which I should not consider myself justified in treating without the

* The reader is referred to the meeting of Aug. 1st, on page 128.

use of instruments applied *per vaginam*. Some object entirely to the use of pessaries as very injurious, and yet do not hesitate to apply a ball soaked in an astringent solution. This, however, is itself a pessary, differing only from the instrument generally used in being medicated. Any instrument or substance applied *per vaginam* to maintain the uterus *in situ* is for all practical purposes a pessary. Astringent suppositories may be used too small to accomplish this object; and if so, they are merely astringent applications, but not pessaries. It is objected to pessaries that they distend the upper extremity of the vagina, and thus serve to perpetuate any relaxation that may previously exist there. The instrument, however, at first should be as small as will answer the purpose, and another still smaller should be substituted as soon as the latter will accomplish the object, and so on until no instrument is any longer required. And here I should remark, that we are generally inclined to apply unnecessarily large instruments to begin with. It is objected that pessaries produce ulceration of the vagina, and that they have sometimes found their way by ulceration even into the bladder, but the pessary should not, any more than any other mechanical appliance, be lost sight of after its application. Pessaries are also said to produce inflammation of the vagina and uterus, a result which I have never seen produced when they have been applied in a proper manner, and under proper circumstances. I should make it a rule, never to apply a pessary, so long as there was inflammation or congestion of either the uterus, ovaries, or vagina; and if applied in accordance with the principles that are indicated, they will not be found to be injurious in the treatment of cases of this kind. But, on the other hand, in some cases they are found not only to be beneficial, but quite indispensable to cure.

III. Though many pessaries have been used, they may be included under three general heads: the globe, discoid, and annular or ring pessary. The stem pessary is also very useful in certain cases, which may therefore be mentioned in connexion with these. The discoid may now be regarded as obsolete. Of the three other kinds, each has its particular advantages as adapted to particular cases.

Dr. MEIGS is inclined to make a very general use of the globe pessary. I should, however, restrict its use more especially to cases of displacement of either of the three kinds mentioned, in which the uterus becomes fixed, whether by adhesion or otherwise. In cases of this kind, and especially of prolapsus in the second degree, with immobility of the uterus, I have found the globe pessary to be of great service. If one be introduced into the vagina so as to protrude slightly, it will in some cases, within twenty-four hours, become inclosed in the canal, and thus elevate the uterus to the normal position, as I have had occasion to observe. The globe pessary is also recommended in cases of prolapsus attendant upon rupture of the perineum, though I am not aware that here it possesses any peculiar advantages.

The stem pessary I should restrict to the treatment of prolapsus where the uterus is forced downwards by either an intra-uterine or extra-uterine tumor, and in which no other instrument would be found sufficient to support the organ.

The annular or ring pessary is found useful in a great diversity of cases. It may be made with a variety of substances, but I prefer that consisting of a watch spring covered by gutta percha; and that made of pure tin. The former can be used either in a circular or elliptical form, though it cannot be bent in its original plane. The latter being flexible, and yet sufficiently firm, can be applied in a great variety of forms, and thus be adapted to a great diversity of cases. Of the precise manner of application in the different class of cases I do not now propose to speak.

I have thus far spoken merely of intra-vaginal pessaries; these alone are required in the treatment of prolapsus, and that they may entirely remove the symptoms in many cases of the anterior and posterior displacements. It is, however, entirely impossible, from the anatomical relations

of the uterus, that an intravaginal instrument should retain the uterus precisely in place, if it has been replaced, in either of these two classes of displacements before mentioned. We must use an instrument which enters the uterine cavity itself. I have said here, on a former occasion, that what I call the radical treatment is actually required in but a very small number of cases, and that, whenever attempted, the uterus must be educated to the tolerance of the instrument. I have found that, when the uterus can bear the common uterine sound for six hours at a time, the intra-uterine instrument, which I have before described here, may be worn.

I have said, however, that in some cases I have removed it for a day or two at the end of a week, if it produced much discharge, and then replaced it. I do not, however, propose now to repeat what I have before said on the occasion alluded to.

At that time I spoke of another more simple instrument which I had used more particularly in the treatment of antelexion, and to which I would now call your attention. It consists of a tube three-sixteenths of an inch in diameter, and about three inches long, passing through two hollow bulbs, also of pure silver. The uppermost of these is about three-quarters of an inch in diameter, and the part above it is the stem or intra-uterine portion of the instrument. The other bulb is of similar construction, and about an inch in diameter, placed at the upper end of the tube, about three-quarters of an inch from the above mentioned. The instrument is introduced upon a staff, and then the latter is withdrawn. When introduced, the os uteri rests upon the upper bulb, while the lower one rests upon the posterior wall of the vagina. It might be supposed that so simple an instrument might fall out of that canal, but this is not found to be the fact in practice, since the walls of the vagina close in around the lower bulb and between the two. It can of course be used only in cases in which the vagina is still narrow and retains its tonicity. And in these conditions it may also answer a good purpose in retroflexion. I have never seen any severe symptoms produced by the use of this instrument, and have had patients wear it for four months.

Dr. J. MARION SIMS, after thanking Dr. Peaslee for his remarks upon the subject, stated that the opinion in reference to pessaries had very much changed within the last twenty-five years. The profession were very much indebted to Dr. Hodge, of Philadelphia, for taking a stand in this matter, but they did not seem rightly to appreciate the fact that each case should be a study by itself, and have a particular instrument, which should be entirely adapted to the indications therein set forth. Thus far he has found the tin annular pessary, as devised by himself, to be the least liable to objections, inasmuch as by its flexibility it would be adapted to a great variety of cases. He coincided entirely with the views advanced by Dr. Peaslee.

Dr. A. K. GARDNER said: After the very full and evidently carefully studied remarks of Dr. Peaslee, and those appended by my friend Dr. Sims, it requires no little courage for me to get up here and say that I dissent almost entirely from the statements made by these distinguished gentlemen in regard to the beneficial effects resulting from pessaries of any form and used in any manner. And in expressing this dissent, I will take up some of the points in the paper and follow the speaker in the order in which he has introduced the subjects.

In the first place, I differ from Dr. Peaslee in his estimate of the abdominal supporters of the many various kinds which are to be found in the shops, and as "uterine supporters or braces" are hawked over the country by itinerant doctors. I have seen many cases much relieved by wearing them. I find their use theoretically to be from their holding up the pendulous and weighty abdomen, and the superincumbent viscera which press down the uterus into the cavity of the pelvis—they practically lift off the weight and allow the uterus to retake its normal position.

Secondly. I disapprove, *in toto*, of vaginal pessaries, and

so thorough is my disapproval, that I have not for some years used them in practice. The reasons for this dissent from generally received opinions are both theoretical and practical. Theoretically, they are wrong; they attempt to cure the effect of disease, and not the disease itself. Pessaries are used for prolapsus. Now what is this falling owing to? When the cause is known, we should attack the cause. Falling of the womb arises either from disease of the vaginal walls or the ligaments of the womb, which, rendered lax, are incapable of holding up the womb, or if these organs are normal in their character, there is some abnormality about the uterus increasing its weight and thus forcing it down, by overcoming the natural supports of the womb, into the vagina. The treatment should be directed to curing the disease upon which the prolapsus depends, and not in holding up the organ by external mechanical means.

Thirdly. Theoretically, then, the use of this instrument being unadvisable, practically we have no better reason. We have not the good results claimed for them by many, and we have numerous evils resulting from their use. They are foreign bodies and act as irritants, producing many disastrous results, leucorrhœa, abortion, hæmorrhage, and by pressing upon the rectum, constipation, and sometimes more serious ills. They are considered to be harmless instruments, and one is inserted in the vagina, and the patient is sent away thousands of miles, perhaps, as if no injury could be effected. What would be thought of a surgeon who would put a starch bandage on a leg and allow his patient to go to New Orleans? And yet into a delicate and diseased vagina he inserts a torturing pessary, and sends the patient away as unconcerned as if it were only an apple dumpling he had put into her stomach. Some of the members of the Academy will remember that I narrated a case some year or two ago of a young woman from whose vagina I removed a globular silver-gilt pessary, which had produced a vesico-vaginal fistula, and caused sloughing of the vagina, great disease of the rectum, and the urine flowed by several openings through the labia, and even above the pubes. The pessary itself was honeycombed with corrosions, green with verdigris, and full of the most noisome pus, while the poor, bedridden girl, had not for years got up from her bed, and had actually forgotten that this direful instrument had ever been applied. This is but an exaggerated case of what frequently happens. It is because that they are so liable to be forgotten that part of these dangers is to be found.

We have not only vaginal pessaries, as described by Dr. Peaslee, of the solid metal, the ring, horseshoe, etc., but we have cups of metal or boxwood, supported by a metallic wire, running out of the vagina and bent around the pubes, fastened to a cushion firmly fixed above the pubes. This is the best of all vaginal pessaries, inasmuch as it makes no pressure upon the vagina, and acts in an injurious manner only as a foreign body, distending, but not harshly pressing upon the vagina. Yet accidents happen with these. One woman was not long since admitted into Bellevue Hospital, where the os uteri had dilated under the pressure so as to allow the cup to pass entirely through the cervix into the uterus, and this had again contracted, and when observed, held the cup firmly within it. The patient was admitted, because her medical attendant could not extract the pessary by any force applied on the portion of the wire which remained in the vagina. Accidentally meeting the gentleman attending this case, he told me that the next day he intended to divide the neck and cut the cup out, as it was impossible to withdraw it. I advised him not to do so, as he would thus produce a wound hard to heal, and attended with after results of some importance, and probably by immediate inflammation of unknown extent; and advised him rather to endeavor to withdraw it by imitating the manner of its entrance, and by slow and continued traction to finally weary the uterine sphincter, and thus obtain dilatation of the os, and the easy expulsion of the pessary. This could be effected by tying to the attached

wire an india-rubber strap, the other extremity being fastened to the bedpost, by which persistent contraction the cup would probably be pulled out as gradually as it was pushed in. This procedure was tried, and the result proved entirely satisfactory.

So too I lately saw a case treated by a distinguished physician of Philadelphia for partial prolapsus and retroflexion, where the cause was an undiscovered fibrous tumor coming off posteriorly, just at the junction of the neck and body of the uterus, and mechanically tilting the uterus backwards. The horse-shoe pessary, used for a year, was here uncalled for, and could produce only evil.

Next, what is produced by a pessary? The vagina, it would seem, is supposed to be a hollow empty tube; but in truth the vaginal walls are in close coaptation—so much so that when a woman is immersed in water, not a drop goes into the vagina. This is generally forgotten. Now any instrument, however small, or the finger, passing into the vagina, pushes a fold before it, and with more or less force separates the parts. Now when a pessary is introduced it is a constant violence; then its weight injuriously presses somewhere, and if it supports the uterus at all, this weight too, falls upon some spot of the vagina which is speedily ulcerated or inflamed, and leucorrhœa is the inevitable attendant. Finally, when the pessary is removed (but pessary-wearing patients, like homœopathic ones, are never cured, and it is rarely ever removed permanently)—if it is removed, what have we then? We have a *hole formed by the pessary*, and not only has it by forming this hole destroyed the natural support of the vagina, the main support of the uterus, but we have a place all made, a vacuum into which the now unsupported uterus will necessarily fall—and even a small pessary, as stated, must make a small hole—and the last state of that woman is worse than the first.

Other objections might be here made which are as applicable to the use of the stem-pessary, and which I will mention hereafter in that connexion and process.

Fourth. I pass to the consideration of the stem-pessary now advocated by Dr. Peaslee, which is the more astonishing as he is the only person that I know of who now uses them, and which I can only conceive possible by recognising the fact that he uses a pessary of his own invention, and which is, I may say *en passant*, unquestionably the best instrument yet made of that character.

The stem-pessary claimed to have been invented by Simpson of Edinburgh, Valleix, Roser and others of Germany, is, I think, an exploded instrument for the cure of displacements. This uterine deviation is either acute or chronic. When acute, the result of any accident, the uterine sound should be introduced into the cavity, or one finger into the vagina and another into the rectum, according to its character, and then, it easily being restored to its normal position, with a few days of rest, the patient is cured. But if it is chronic, it may have been the neglected result of accident, or the woman was married early and before the organ had attained its full dimensions, and it had been displaced by vigorous coition, and then we have had inflammation with more or less adhesions, even to a complete binding down of the organ to the parietes of the pelvis, and then this result of disease is unalterable.* If the sound raises it a bit, it falls back again and again as oft as repeated,

* A specimen beautifully illustrating this statement I recently saw in the possession of Prof. Jacobl. It was removed from the body of a lady who had died of disease of the heart, the symptoms of which were so severe as to cause the uterine affection to be disregarded during life, although the fact was known that there was some uterine displacement. Had there been no concomitant disease, she would, according to the theory advanced, have been subjected to this process of impalement; the uterus by means of the sound would have easily been restored to its normal position, and would more speedily have returned to its abnormal one; then the stem-pessary would have been introduced with its concomitant offensive leucorrhœa and its attendant dangers, and when after a lapse of time the stem-pessary being removed, it would as I have before stated, have returned to its flexed position, and the specimen showed the reason. The uterus was not only retroflexed, but thin, firmly organized membranous bridges, three or four in number, extended between the uterus and the rectal wall, which were so elastic as to allow the uterus to be moved, and which also by the same property pulled the uterus back again so soon as the support was removed.

and the introduction and wear of the stem but makes disease where none exists, and the organ returns to its position as soon as the support is removed.

In other acute cases we have a flexion or version, the result not of accident but of disease. The uterus has undergone a *fatty degeneration* at the point where it has given way, and although it may be forcibly lifted up and perhaps kept up for weeks and months, so soon as the support is removed the uterus necessarily returns to its position, because there is want of substance to maintain it, if not also a cicatricial contraction. It would be as unscientific in these cases to apply a stem-pessary as to attempt to straighten a curved spine after the bodies of the vertebra have been eaten away. It may be held up for a time, but nature will not unfortunately put in a new "underpinning" while it is thus mechanically supported.

Furthermore, interference of this sort is uncalled for. This condition of things is not disease, but the result of disease. Science can sometimes prevent and cure diseases, but what disease has destroyed science cannot restore. Flexions of the womb are of little or no importance, save as they are or are not associated with inflammation in its various forms. This we may cure, and this is what we should treat, when these cases come to us, and by so doing we may do great good, and when this is effected, if there has been no actual disorganization, the uterus may retake its normal situation.

Again we are not justified in using the stem pessary in any great number of cases, even if it is conceded to be occasionally beneficial. This opinion is concurred in by Simpson, Scanzoni, Kiwisch, Aran, Nonat, in fact by all the gynecologists of the world. Its accidents are too fearful—and these accidents too frequent. Inflammation of the uterus resulting therefrom is propagated to its appendages and the peritoneum, with great pain, danger, and even death.

While I thus, in common with others, and for the above reasons, renounce the use of the stem-pessary for the treatment of flexions, I do advocate and use a pessary with a smaller stem, which does not enter into the cavity of the uterus proper, but merely into the neck, for the cure of cervical contractions, that is to say, for strictures, and for this purpose will gladly avail myself of the small instrument exhibited by Dr. Peaslee of his invention, which is a modification of a pattern which I have used somewhat for such purposes. I never see any cases of flexion uncomplicated. There are many women, of whom there was never a suspicion that there was any flexion of the uterus, till it was revealed by a post-mortem. A flexion is not disease as I have several times repeated, but the result of disease, and it often exists for many years unsuspected, and is not discovered until she goes to a physician for some complication. The possessor of this malposition is unquestionably predisposed to local disturbances, to inflammation of the uterus, etc., and the physician who examines the patient imagines that in discovering a chronic flexion, he has found the actual source of all the difficulty. No such thing, he has found only a "complication" aggravated by the abnormal position of the organ. Now what is the treatment? Simple enough. Treat the complication which alone is curable. Cure the inflammatory or ulcerated condition by leeches, scarifications, cold injections, purgatives, etc., as may be required. So soon as the "complication" is relieved, the flexion still remaining, the patient is as well as she can be. I never see any but complicated cases.

(To be continued.)

PROF. HAMILTON, of Starling Medical College, Ohio, states that Dr. Henry Hewitt, of Valparaiso, South America, recently reported that Gage, the man through whose head a tamping-rod, seven inches long, an inch and a quarter in diameter, and weighing 13½ lbs., passed, is living in Chili, in the enjoyment of good health.

M. GROUX, with the congenital fissure of the sternum, is again exhibiting himself in London.

Correspondence.

EXORBITANT CHARGES OF APOTHECARIES.

[To the Editor of the AMERICAN MEDICAL TIMES.]

DEAR SIR—It has been asserted that he who adds one drop to the sea of human happiness is a benefactor. As such is entitled to some consideration, may I ask for a small space in your Journal wherein to contribute a drop of comfort to "A Physician," who, in your last issue, was much perplexed at the exorbitant charges of those who compound his prescriptions. And as he sees no alternative but secession from that useful auxiliary branch of medical art styled Pharmacy, I may be permitted to suggest a much more simple and equally effective remedy against the evil, in his employment and encouragement of those who are more just in their charges. This idea, however, presents the real difficulty to be overcome.

How shall we determine the justice of the apothecary's charges, or where shall we find a standard or basis for a judgment of them? Shall we look to that which establishes the just recompense to the physician, for his long devotion to study and research, and for the responsibility of his position; or to that standard which determines the exact value, by computation, of time for the cobbler's patch and the cost of the material? The life of the physician is one of toil and anxiety; that of the apothecary scarcely less so; and we should seek to stimulate in him a rivalry with his fellow-laborers for increased proficiency in his calling, rather than a dollar and cent competition. When a proper remuneration for the qualified apothecary is fairly determined on, the course is clear, encourage the just.

Of the doctor's experience in homoeopathic competition, he can best speak; he may feel its effect, but I think he is at fault in his diagnosis of the cause; for it is well known that the homoeopathic physician fully covers all expenses in his fee.

There are causes for retaining the family physician, and others equally cogent for his dismissal, as the following relation of facts will show:

A lady possessed of opulence and economical habits, called on a physician to request that he would visit her sick daughter. The physician being informed that the invalid was not under the care of any other, complied with the mother's request, who, in accordance with her custom, desired to drive a bargain; and the following colloquy ensued. "Doctor, how much will you take to cure my daughter—no cure, no pay?" The doctor replied, that he did not practise on that principle; he would exercise his utmost skill in the case, and charge, as was his custom, one dollar per visit. "Oh," said the mother, "our old family physician never charged over fifty cents." "Then," remarked the physician, "I advise you to recall him." "But," said the mother, "he has already attended her without benefit, and you have been highly recommended for her case." "Madam, that is of secondary consideration; his charges defy competition."

Thus you see there may be differences between the physician and the patient, without the intervention of the apothecary.

One word further in regard to the custom that our medical friend would recommend; he knows two or three old medical practitioners who carry their pills in their pockets. What disciple of the mortar and pestle does not know, within his own experience (leaving presumptuous inference to others), of at least two or three practitioners who carry pills, perhaps, to protect those who can pay; while the poor are handed over, by prescription, to the tender mercy and cold charity of the

APOTHECARY.

ANNUAL REPORT OF ST. LUKE'S HOSPITAL.

FOR THE YEAR ENDING OCTOBER 18, 1860.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—DURING the past year, there have been treated in this hospital 468 patients; males 232; females 236. Of the entire number, 54 have been children; surgical 167, medical 301. There were 53 patients in the wards at the commencement of the year; 328 have been discharged during its course, and 85 are now in the wards. There have been 59 deaths and 4 casualties. Twenty-one surgical operations have been performed, eight of them capital. The results of these have been successful, except in one instance, a case of hernia in an old subject, where strangulation had existed for thirty-six hours prior to admission to the hospital. A large number of persons, suffering from recent injuries, have been received from the hands of the police, including twenty-two cases of fracture. In the medical wards there has been a very decided increase during the past year in the proportion of acute cases, though, as heretofore, those of a chronic character predominate. The ward devoted to the treatment of children, is a new and most important feature of the hospital. The necessity for such a department is amply shown by the fact, that it has been more rapidly and more constantly filled than any other in the house. Both medical and surgical cases have been treated here, though the majority have been of the latter class. Diseases of the spine and of the hip-joint have claimed a large share of attention, and the results of their treatment have been most satisfactory. For the spine, the supporter invented by Dr. H. G. Davis of this city, has been a most valuable ally in treatment; and more recently, the splint, invented by the same gentleman, for the relief of morbus coxarius, has been introduced and used with thorough success. No death has occurred in this department, and the beneficial results of its arrangement and working—especially of the accurate nursing which in patients of the age here treated, is an indispensable condition of success—have been so striking, that the care of the sick children is regarded by members of the medical staff as one of the most peculiar vocations of the hospital.

The bill of mortality for the past year shows a reduction of over five per cent. from that of the previous year. As explanatory of the still somewhat large proportion, it is sufficient to state that many cases, not ordinarily eligible to hospitals, have been here admitted; cases found only when in the last stages of disease, sometimes even moribund, and brought into the wards, not that they may be afforded medical relief, but that their last hours may be rendered more comfortable. Their only record is their certificate of death, and they ought rather to be ranked as beneficiaries of the church than as patients of the hospital.

The general hygienic arrangements of the house, have still proved most satisfactory. In behalf of the Attending Physicians and Surgeons,

EDWARD B. DALTON, M.D., *Resident Physician.*

FOREIGN CORRESPONDENCE.

BETHLEM HOSPITAL.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—Bethlem Hospital has long been one of the "lions" of London. In Pepys's day parties used to be made to mock and gibe at its unhappy inmates, and to "stir them up with a long pole" for amusement. Although, with Molière's physician, "*nous avons changé tout cela*," it is still a centre of attraction—after its kind; to foreigners more especially so; and, as an American, proud of the advance he fondly believes to have been made in his own land over others in the conduct of most philanthropic institutions, I have been led to visit it by the desire of comparing, on my return home, our similar establishments with the reputed

model one of the old country. This not unnatural wish was further stimulated by the perusal of an article on *Insanity and Lunatic Asylums*, which appeared in a late number of the *Quarterly Review*; but still more by having accidentally become acquainted with the private history of a party confined in one of the *Criminal Wings* of the Hospital, or parts devoted to the reception of those unfortunate persons who in delirium have committed offences that, but for their insanity, would have forfeited their lives. Moreover, some brief observations in reference to the position of this much-to-be-pitied class of individuals, published from time to time in the *Household Words*, had interested me not a little in the subject. I resolved, when I had the opportunity, to make public such remarks as I had to offer, and to court inquiry; so that if the same evils which I, in common with every man of ordinary humanity, could not help deploring as soon as known, should happen to exist in the United States, the people may speak the word and the remedy be at once applied.

It appears that every improvement which has taken place in Great Britain in the treatment and condition of the insane has been commenced by private persons, and has been hardly wrung from and forced upon corporate bodies and the government. A few years ago occurrences which need not be detailed drew inquiry into the state and management of Bethlem Hospital. The public mind was fairly roused, and when *John Bull* is once awakened—he rings true metal and—goes to work. The Hospital (from its extent rather than its architecture, an imposing building, and capable of accommodating about four hundred patients) was found to be what the *Criminal Wings*—to the disgrace of the government and, through its infamous neglect, of the jealous but easily gulled British people—still remain, namely, more gloomy, depressing, and virtually uncared for than most prisons: a slough of despond more fitted to insure perpetual madness than cure a disease which is as manageable and curable as any other, if treated with care and judgment. The dietary, too, was deficient.

All this—the Hospital enjoying a princely income—was pronounced, like a noble sinecurist's prayers for more sinecures, "too bad." The committee—city great men, corporationists, men of "calipash and calipee"—had to eat humble pie. The constitutional iron-gratings were torn from the windows; light and air let in; continental improvements, both ornamental and remedial, introduced; the medical staff changed; the dietary amended—certainly not perfected; and—worse and more humiliating still—this bloated, plethoric, pudding-headed, and beef-witted civic institution, compelled to renounce its independence and submit to the visitation of the Commissioners in Lunacy.

As at present altered, rather than re-formed, the Hospital has become a fashionable show-place. This is in some degree to be deplored, inasmuch as the health and comfort of the patients are, it is to be feared, largely sacrificed for the sake of keeping up appearances.

To instance. The hour of rising is 6 A.M.; of going to bed, 8 P.M.; and out of these fourteen hours, *barely two* are devoted to out-of-door, or indeed any exercise, whilst to make the matter worse, the exercise hours are those most unsuited to the purpose—being either from ten to twelve, that is, when the heat of the day in summer renders brisk locomotion unadvisable or rather impossible, or else from two to four, still more unsuitable at the same season of the year, and made even more so by the fact that one o'clock is the dinner hour. Being up at six, the patients might easily breakfast at seven, instead of at eight, as at present; and, for two-thirds of the year, be out and have two hours' fresh morning air and the genial time for exercise in the English climate, before ten, their present airing hour. In the summer months they ought to go out in the evenings from five to seven, or half-past; and afternoon exercise, that is, exercise taken shortly after dinner, ought to be regulated according to the seasons and state of the weather.

The immense importance of air and exercise to the insane especially, may be estimated by the fact that, stating the elements of recovery to be ten, air and exercise may be set down as equivalent to seven of the number.

Various reasons would, doubtless, be alleged by the authorities of the Hospital in defence of this monstrous abuse, or to excuse it. The plain truth, I am induced to believe, is that the hours, from 6 A.M. to 10, breakfast and its preparation included, are spent in making the wards, galleries, etc., sightly and presentable to the visitor, the hunter for *gapc-seed*, or, maybe, a committee-man, seized once and away with an idea that his walking through the edifice as quickly as he can stride is an act equally magnanimous, serviceable, patriotic, and philanthropic. All being cleaned up and decked out, the next object is to keep it in trim; and too frequent airings in the yards and grounds might bring in a certain amount of dust into the show-rooms, and mar the effect sought to be produced on the sight-seer, who but too seldom reflects that "all is not gold that glitters."

This deficiency of air and exercise falls the most heavily on the Criminal patients, and, next to them, on the "Incurables," or those chronic cases for which large funds have been bequeathed to the Hospital separately from the endowments for the "Curables;" since the latter have the advantage of occasional excursions into the country by railroad and, I believe, by steamboat. But it is those among the Criminal Lunatics who have been restored either wholly or partially to their senses who are the severest sufferers.

The term "Criminal Lunatic," as the Quarterly Reviewer alluded to justly observes, is a misnomer; equally calculated to mislead and prejudice the unreflective part of the community, and to depress, wound, or irritate its recipient. It is a flat contradiction in terms. But, mark to what a word may lead! A hapless individual, when in an irresponsible condition, commits an act—which, if he recover his senses, embitters his after-existence; and, when recovered, and, humanly speaking, beyond danger of relapse, is in ninety-nine cases out of a hundred condemned to a worse fate than the majority of the most criminal convicts—to imprisonment for life, and that—imprisonment with madmen, subjected to the same humiliating restraints, at the mercy of the same, too often, ruffianly and mostly low and vulgar attendants; and herded—no matter what his breeding, attainments, or previous position, with the off-scourings of humanity! I ask, is it so in this country? If patron England, if Christian and slavery-denouncing England permit this great wrong, can it be otherwise with us? If, indeed, it be so, I feel convinced that publicity will at once sponge out the social anomaly.

So far, however, as the English law is concerned the wrong cannot happen. On attestation of recovery by competent medical authority, the several Secretaries of State are each empowered to liberate the recovered Criminal Lunatic. Practically this power is engrossed by the Home Secretary, whose duties are so extensive that were he sublimated beyond the mortal necessities and imperfections of reflection and sleep, and to devote every second of his time to the duties of his office, he could not get through one-half. It is a rule, it seems, of his subordinate officials, to *shelve*—clerks in public departments will comprehend the full meaning of the term—all petitions and applications for the liberty of any of this Pariah class, except where interest, and in particular that interest which is comprised in the command of sundry Parliamentary votes, can be brought to bear. This is bad enough. It is, however, exceeded in its black badness by the consequences which ensue from the peculiar position of the medical officers of the Hospital. I proceed to explain.

The Criminal Wings of Bethlem were built by the government, which entered into an agreement with the Governor of the Hospital for a stipulated, and, to do it justice, liberal rate of payment, for the cure, care, and maintenance of lunatics who had come within the verge of the law, and

about 120 of whom, male and female, are confined within its walls. This payment includes remuneration to physicians and other officers of the establishment for their additional trouble. Now, the bounden duty, legal and moral, of the medical head of a Lunatic Asylum is to insist upon the removal of its inmates as soon as their sanity is established. This has been done in several instances with reference to Criminal Lunatics in other places—*nominatim* by the principal of a private asylum near Salisbury, with whom are domiciled by the government some seventy or eighty such patients; but whether by official order, whether through a clinging to the old system of civic corporate despotism, or owing to the idiosyncrasy of the medical superintendent—the recovered patient or his friends are point-blank refused a certificate of sanity. What I affirm, I am prepared to prove. Thus, *proh pudor!* the representative of one of the noblest and most exalted of professions debases it and lowers himself by stooping to the functions of a jailer, and the governors and committee of an institution ignorantly supposed to be an exemplar of beneficence, condescend to act the parts of turnkeys! The patients of the class now under consideration released from this medical "prison-house," are so, as I have said, by interest—or else are *dragged out* by some dauntless attorney threatening exposure. Otherwise "three-headed Cerberus" was not a more ruthless janitor than the constabulary of Bethlem Hospital.

I have alluded to the dietary,* which I append below. Bearing in mind that the government pays fifteen shillings and four pence weekly for each Criminal Lunatic, besides defraying the expenses of physician, surgeon, keepers, etc., and that the Hospital has a *net* income of about eighteen thousand pounds, or ninety thousand dollars *per annum*, and not taking into account either that the six ounces of meat—the dinner ration—are more frequently three, or that the quality is often questionable, besides other shortcomings of the kind—I inquire of calculators and contractors the probable profit to the Hospital arising out of the Criminal Lunatics, and should further like to hear from its governors how they dispose of this large surplus yearly income—since surely the maintenance of some three hundred patients yearly, on such a dietary, does not exhaust the eighteen thousand which they have the disposal of. The gross income of the Hospital, not including the subsidy from government, is about twenty-eight thousand pounds sterling a year.

Moreover, many of the patients, particularly the Criminal ones, are put to use. Some scour and clean; others tailor, make mats, whitewash, house-paint, &c.—doing, in fact, the work of keepers or attendants—who, indeed, in the Criminal Wings are rather the attended upon, having their very shoes blacked by the patients. So fast are some of these "workingmen," as they are termed, overworked, that were the Coroner's Inquests held here aught but a farce, very ugly things would creep out. But, though an inquest is held on all who die within the Hospital, its *officers and officials alone are examined*. Be it borne in mind that there are those among the Criminal Lunatics who are as sound of mind and fit to give evidence as any without the walls of the building.

This brings me to another point. Soon after the appearance of the article in the *Quarterly Review*, one of the improved wards in the free or charity part of the Hospital was devoted to the use of some forty of the Criminal patients. I will not now inquire into or throw a slur upon the motives which induced this amelioration; but, unluckily, from what I can learn, there has been a strange jumbling of the recovered with the all but raving mad, of the better with the worse class of patients, of the inevitably filthy, foul, and disgusting with the more decently conducted. In short, were a premium offered for the quickest and surest mode of driving a recovered or recovering

* DIETARY.—Bread, 7½ lbs.; Meat, 2 lbs. 10 oz.; Vegetables, 5 lbs. 4 oz.; Tea, 1½ oz.; Sugar, 8 oz.; Butter, 8 oz.; Milk, 1½ pints; Small Beer, 9 pints. Weekly—males; females, proportionably less.

patient hopelessly mad, this heterogeneous mixture, this Dead Sea fruit sort of mercy, might boldly claim the prize. As if to enforce this view of the matter, although an infirmary is *locally* attached to this ward, the patients have not the benefit of it. The sick and fœtid are kept comingling with the healthy—and the exclamations, sighs, and groans of the dying strike horror into the hearts of those who know that such will one day be their own fate.

If this brief statement of a few of the facts which have come within my own knowledge, should lead to inquiry on both sides of the Atlantic, my purpose is answered. The press is an electric agent, and what it may lack in telegraphic speed, it gains in power. In all civilized countries, even in the least free, its subtle currents permeate; but between England and America its pulse is ever beating. The people of both countries are too generous, when fearful abuses are brought to light, to suffer them to exist. If we are sinning in like manner to that above described, we have the power of making the necessary reforms in our own hands; and though *John Bull* yields to the muzzle on too many subjects, let his really humane heart be touched, and he will have his way—the right way, too.

VIGIL.

Medico-Legal Record.

PROSECUTION FOR ALLEGED MALPRACTICE AFTER THE LAPSE OF SEVENTEEN YEARS—SUIT WITHDRAWN.

The following case, which recently came to hand, is so extraordinary as to demand a record.

On the 9th of Feb., 1843, Dr. S. G. Ellis, an intelligent and well known practitioner, then residing at Gowanda, Cattaraugus Co., N. Y., was called to see Henry C. Springer, æt. 3 years, the child of Samuel C. Springer, residing also at Gowanda. In attempting to climb upon a sled loaded with wood, this child had fallen under one of the runners, and the whole load had been drawn across the lower third of his left thigh, crushing the bone and soft parts, and thrusting one of the ends of the broken bone through the skin until it protruded two inches or more.

Dr. Ellis, seeing the gravity of the accident, and being in doubt whether it was proper to attempt to save a limb thus mutilated, requested them to send for Dr. Seth Field, who was much older than Dr. Ellis, and a man of larger experience. After a careful examination of the case, it was determined not to amputate, but to dress the limb as for a fracture, reserving the amputation for a future day, if it should become necessary.

Dr. Ellis applied a roller to the foot and then up the leg nearly to the knee, and after covering the wound made by the protruding bone with a piece of lint spread with simple cerate, he laid over the whole thigh, from the knee upwards, a Scultetus bandage. Two long splints were employed, one of which reached the axilla and the other the groin, and these were united below the foot by a cross piece. By means of these splints extension and counter-extension were satisfactorily effected. The limb was watched carefully from day to day, and on the third day the Scultetus bandage was opened, and although the skin underneath looked dark and coated with extravasated blood, no actual decomposition had yet taken place. On the fifth or sixth day all the dressings were removed, and a considerable slough separated from the lower and back part of the thigh.

In consultation with Dr. Field, it was again determined to continue the attempt to save the leg. The limb was continued in the straight splints, but it was additionally supported by being placed in a box made with an opening to correspond with the wound, through which it might be dressed.

The wound discharged for four or six weeks; the boy became much emaciated and restless, so that it was difficult to

keep him still. About four months after the accident Dr. Ellis removed the dressings, and supposed the bone had united. The position of the limb was good, and it was nearly or quite its full length.

A few days later the father informed Dr. E. that in getting the boy out of bed in the morning, he discovered that the limb bent at the point of fracture. The splints were at once reapplied by Dr. E., and continued two or three weeks, but as no improvement occurred, by advice of Dr. Field, the long splints were removed, the short splints and bandages being continued, and the boy was encouraged to get about upon crutches, in the hope that use of the limb and improvement of the health might still accomplish the union, but this also failed.

Dr. E. continued to practise in the family of Mr. Springer until he left Gowanda, which was four years ago, and no complaint had ever been made against him for malpractice.

This child of three years at length grew to be a man, and as soon as he was twenty-one years old he commenced a suit against Dr. Ellis, which was noticed for trial in the Circuit Court for Erie Co., N. Y., Oct. 1, 1860. Dr. Ellis made such preparation as he could for a defence. Dr. Field was dead. Another physician who had also seen the child occasionally during the treatment, was dead, and a third medical witness was in an insane asylum. His own recollection of the circumstances was imperfect, and he had no memoranda, inasmuch as he had never anticipated a prosecution. His brother, Dr. D. E. Ellis, who had just been admitted to practice when the accident occurred, was fortunately present at some of the dressings, and was able to testify, as were also one or two non-medical witnesses, who were still living.

On the 24th of March, 1860, Springer consulted Prof. Hamilton, then of Buffalo, in relation to the condition of the limb. He found the bone un-united except by ligament; the point of fracture being about four inches above the joint. He could turn the lower fragment backwards or inwards to a right angle with the upper fragment, but it could not be bent so much outwards or forwards. The whole limb was four and a half inches shorter than the other, but in walking or standing he brought the heel within two and a half inches of the ground, a lateral curvature of the lumbar vertebræ allowing this leg to descend two inches. In circumference, both thigh and leg measured as much as the opposite limb—it seemed to be as muscular. He walked rapidly and without a cane, and was not easily fatigued. When he trod upon this foot with the whole weight of his body he did not feel the bones yield or slide upon each other. In short, although his limb was deformed and imperfect, it was infinitely better than an artificial limb, and so Prof. H. informed him.

Before the case was reached in the October calendar of this court, the suit was withdrawn at the urgent request of the father of the young man, who declared that he saw no justice in its prosecution.

The attorneys in this case were C. C. Torrence of Gowanda, for the prosecution; and Henry Rogers of Buffalo, N. Y., for the defence.

MEDICAL DEPARTMENT OF UNIVERSITY OF THE PACIFIC.—The regular course of lectures in future commences on the first Monday of November, instead of May. There have been two courses of lectures in this institution, the number of students at the first session being eleven, at the second, fifteen. The graduates are—first session, ALFRED ATKINSON, native of England, and CHARLES E. A. HERTEL, native of Germany; second session, CHARLES C. FURLEY, native of the U. S. The *San Francisco Medical Press* says: "Though medical education did not commence until comparatively a late period, when it did commence the system of teaching was, at once, the most rigid; there is now no medical school in the older States, in which the examination for graduation requires a higher order of qualifications than in the Medical Department of the University of the Pacific."

Medical News.

APPOINTMENTS.

DR. EUGENE PEUGNET, late of Bellevue Hospital, N. Y., Assistant Physician at Randall's Island.

DR. J. PARRISH, late of Bellevue Hospital, Assistant Physician in Brooklyn City Hospital.

PERSONAL.

PHYSICIANS VISITING NEW YORK.—Dr. Walcott, Utica, N. Y.; Dr. O. W. Thayer, Binghamton, N. Y.; Dr. Jerome C. Smith, late of McLean Asylum, Mass.; Dr. Levi Bartlett, Skaneateles, N. Y.; Dr. A. H. Wright, formerly of Va., now Missionary Physician at Ooroomiah, Persia; Dr. Wilson, Canada West; Dr. Fayette Jewett, formerly of South Boston, now Missionary Physician, Tocal, Asia Minor; Dr. Ford, Canada West.

LOCATION OF PHYSICIANS.—Dr. JAMES E. REEVES, author of a work on "Enteric Fever," at Fairmount, Marion county, Va.; Dr. G. W. HUNT, late of Bellevue Hospital, at No. 31 Grand st., Jersey City, N. J.; Dr. JOHN HOWE, late of Bellevue Hospital, at No. 211 W. 17th st. N. York City; Dr. ALEXANDER HADDEN, late of Bellevue Hospital, at No. 140 W. 50th st. N. York City.

EPIDEMIOLOGICAL RECORD.—Diphtheria is prevailing very fatally in Madison county, N. Y., particularly in the towns of Hamilton, Lebanon, and De Ruyter. The same malady is also prevailing to some extent in Saratoga county. Sporadic cases continue to appear in New York, Brooklyn, Jersey City, and their suburbs. This threatening distemper has become so extensively diffused in this country, and the probabilities of its continued prevalence are so imminent, that every physician should make himself thoroughly familiar with all that can be known respecting its pathology and treatment.

THE NASHVILLE MEDICAL RECORD comes to us in a new form, being a quarto, and closely resembling the MEDICAL TIMES in the size of its page, and in its typography. This change gives it a most attractive appearance, and will doubtless contribute much to its success. PROF. WRIGHT has retired from its editorial management, and is succeeded by PROFS. ABERNATHY, MADDIN, and CALLENDER, all of the Shelby Medical College.

SUIT FOR MALPRACTICE.—A doctor of San Francisco has been prosecuted for \$10,000 damages, by the father of a little girl, whose thigh being broken was set by the defendant and reunited with some shortening.

DR. G. B. H. MACLEOD has been elected Professor of Surgery in the Andersonian University, Glasgow.

M. HEYFELDER has lately described a case of pleuritic abscess, which pointed between the second and third ribs on the right side. It pulsated with each beat of the heart. He knows of but two similar cases on record; one by Arun, and another by Stokes.

SIR HANS SLOANE was the first physician of England who received the title of baronet; he was very rich, and Lord of the Manor of Chelsea.

DR. WOLFE, the correspondent of the *Lancet* from the hospitals of Garibaldi, has been arrested and tried by a council of war on charges of defamation of the Italian surgeons, of being an adventurer with forged credentials, etc. The charges were not sustained, and he was honorably acquitted.

THE MINISTER of Public Instruction, France, has published a circular addressed to the directors of schools and colleges, forbidding the use of tobacco and cigars by the students. This movement is due to certain statistical results obtained at the Ecole Polytechnique and other public schools and colleges, attesting that the smokers were also the dunces, and that the intellectual as well as the physical development of the students was checked by the use of tobacco.

TO CORRESPONDENTS.

Does Rice cause Blindness?—In his evidence, in the case of the alleged slaver Kate, last week, in the United States District Court, Capt. Faunce, of the Revenue service, is reported to have stated that "sailors do not generally eat rice, because they think it may make them blind." Can any of the readers of the MEDICAL TIMES explain the origin of this supposed connexion between rice and blindness? J. B. S. N. Y., Nov. 24, 1890.

J. W. R.—We have communicated with the author referred to, but the name is not inserted.

L. S.—The latest work on Diseases of Females is by Prof. Hodge, of Philadelphia.

Does Prof. Willard Parker write for the Reporter?—"A young man purporting to be an agent for the Philadelphia Reporter, is travelling through this part of the country in search of subscribers for that journal, and among other inducements which he holds out in favor of the Reporter, is the fact that Dr. Willard Parker regularly reports the practice of the New York Hospitals for its pages. Is there any truth in this statement?"

Onondaga Co., N. Y.

INQUIRY.

This falsehood is too transparent for any sensible physician to waste ink upon.—ED. MED. TIMES.

COMMUNICATIONS have been received from:—

Prof. LOUIS BAUER, N. Y.; Dr. JAMES C. REEVES, Va.; Dr. G. M. HUMPHREY, Cambridge, Eng.; Dr. WM. PIERSON, N. J.; Dr. S. H. FRENCH, N. Y.; Dr. W. B. ROPES, N. Y.; Dr. J. K. LEAMING, N. Y.; Dr. S. STREVENSON, Mich.; Mr. J. A. PIERCE, Mass.; Dr. J. S. BROOKS, C. E.; Dr. C. E. MURPHY, N. Y.; Dr. T. WILDER, Pa.; Dr. S. ELY, N. Y.; Dr. S. B. BAILEY, N. Y.; Dr. G. CAULIER, S. C.; Prof. A. K. GARDNER, N. Y.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

From the 17th day of November to the 24th day of November, 1890.

Deaths.—Men, 87; women, 78; boys, 110; girls, 99—total, 369. Adults, 160; children, 209; males, 197; females, 173; colored, 7. Infants under two years of age, 191. Among the causes of death we notice:—Infantile convulsions, 81; croup, 8; diphtheria, 14; scarlet fever, 27; typhus and typhoid fever, 7; consumption, 56; small-pox, 4; droopy of head, 9; infantile marasmus, 17; inflammation of brain, 9; of lungs, 27; bronchitis, 7; congestion of brain, 8; of lungs, 8; erysipelas, 4; whooping cough, 4; measles, 5.

Nov.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb, Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	"	"	"	"	"		0 to 10	In.
18th.	29.44	.27	46	44	50	3	4	SW.	9.4	.4
19th.	29.44	.07	45	40	52	4	6	SW.	9	
20th.	29.54	.14	42	35	50	7	11	SW.	9	
21st.	29.81	.31	37	33	43	6.5	10	NW.	0.5	
22nd.	30.01	.14	35	30	40	5.5	9	NW.	1	
23rd.	29.74	.51	45	38	52	2	3	SE.	10	1.8
24th.	29.69	.54	30	16	45	3	5	W.	8	

REMARKS.—18th, W.R. rain, and fog, A.M., wind light all day; 19th, light rain, P.M., wind light all day; 20th, cloudy early, A.M., wind light all day; 21st, cloudy late, P.M., calm all day; 22nd, rain all day, calm, A.M., tempest at night; 23rd, rain, and light snow, A.M., wind fresh all day, the temperature fell rapidly and regularly from 45° to 15° in 24 hours.

MEDICAL DIARY OF THE WEEK.

Monday, Dec. 2.	{ NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Dec. 4.	{ NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
Wednesday, Dec. 5.	{ EYE INFIRMARY, Operations, 12 M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Sayre, half-past 1 P.M. N. Y. ACADEMY OF MEDICINE, half-past 7 P.M.
Thursday, Dec. 6.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
Friday, Dec. 7.	{ NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Church, 1½ P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Dec. 8.	{ BELLEVUE HOSP., Dr. Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. EMIGRANTS' HOSP. WARD'S ISLAND, Dr. Carnochan, 8 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

BELLEVUE HOSPITAL.—On Saturday (this day), Dec. 1, Dr. JAMES R. WOOD will resect the head of the femur for morbus coxarius.

Original Lectures.

COURSE OF LECTURES

ON

DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL,
IN THE PRELIMINARY COURSE.

SESSION 1880-81.

By A. JACOBI, M.D.,

PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE I.

To a truly scientific physician, nothing is more evident, than that the physiology and pathology of the human organism have not been sufficiently elucidated. The medical sciences are by no means completely developed; they never will be, for they combine a knowledge of all the varied and intimate physiological functions and obscure pathological changes of the physical and mental organs of the human frame; they never can be, for their basis, the human organism, will and must undergo changes and further development. Those powerful minds who have done most, and are still in our times working most successfully, for the advancement of medical knowledge, have been and are still the first to admit the truth of this proposition, and are the first also to acknowledge that more remains to be done than has been done hitherto. Fortunately, however, there are a large number of subjects so well known and so clearly understood, that even in this ever-changing science we are enabled to point out the way to further investigations, to arrange in mathematical order our conclusions, and win thereby for medical science not only a place amongst the so-called exact sciences, but the acknowledgment of educated men, that it is the noblest and most comprehensive amongst them.

Having the honor, as I believe, of being the first in this country to teach infantile pathology as a distinct and fully independent branch of medical education, I did not deem it proper to begin with a subject liable to be misunderstood, mistaken, or misconstrued. A subject of this description I have therefore determined, in this preliminary course, to consider at length, viz. the Physiology and Pathology of Dentition—a subject which is but imperfectly understood. But there should be nothing mysterious about it; the process of the early formation and the final development of teeth is well understood, and on this safe basis we are able to rest our conclusions relating to pathology and therapeutics. So little, however, can we rely on the correct interpretation of facts by observers, that even here we shall have to contend with prejudice and ignorance.

You know that among the public at large, even among the educated part of the community, teething is regarded as one of the two scapegoats of all the diseases of infantile age. Teething and worms are among mothers acknowledged as the universal and all-powerful sources of disease. Whenever an innocent *ascaris* or a puny *oxyuris* is observed in the faeces of a child, worms are, for years to come, considered as the undoubted cause of any disease that may occur. Teething, a normal, physiological development, taking place at an age which for many reasons is subject to a large number of diseases, has a strong hold on the imagination of frightened maternal minds. The first dentition generally occupies the first two years of early infantile life; a period in which the child is peculiarly liable to diseases both numerous and frequently of a dangerous character. As the protrusion of a tooth (and in the average a tooth will cut every month) is a remarkable phenomenon, and is something new and visible to the eyes of even the most shortsighted, it is believed to be the cause of every unfavorable occurrence in early life. A mother will bring to you her child, thin, emaciated, and anæmic, with sunken eyes

and the wrinkled physiognomy of old age, and tell you that she is well aware the poor thing is suffering from teething, and that therefore nothing can be done to alleviate its sufferings. She will never be convinced that her child is dying from her own neglect; but she has allowed a slight catarrh of the intestines, perhaps, to degenerate into incurable ulceration of their follicles. Thus you will learn that ignorance and prejudice will attribute all, or nearly all, the diseases of the infantile age to a normal process. To the same cause are attributed inflammations of all the external and internal organs, the brain and its membranes, air passages and lungs, mouth, throat, stomach, and intestinal canal; as also cough, vomiting, diarrhoea, and dysentery, derangements of the secretion and emission of urine, chronic eruptions of the skin, convulsions and paralysis, exudations of serum, and extravasations of blood, in any of the numerous organs of the infantile body. Teething is thus considered the efficient cause of most of the terrible diseases which prove fatal to thousands of the rising generation. I can assure you that the readiness to attribute all the diseases of infantile life to teething has destroyed more human beings than many of the wars described in history. For though parents are so much impressed with the belief of the dangers of teething, still they never think of attempting to save the lives of their children by counteracting the supposed life-endangering power of a normal process.

The common supposition that teething is a predisposing cause of disease, nay, even a disease in itself, prevails over all civilized and half-civilized countries. What is now, however, the belief of the public, has been the conviction of the medical world through centuries, almost down to the present time. General experience shows that the persuasion of the scientific world, after having been given up to make room for more correct opinions, has remained in the public at large; and it is to be feared that it will not soon be removed. And it would be fortunate if this prejudice were confined to the public. But unfortunately it still lingers in the medical profession, and it is for this reason that I have dwelt upon it so lengthily. Nothing is more common, than to hear doctors of medicine, young and old, in cases of infantile disease, diagnosticate teething, after mother and nurse have done so before; and nothing is more frequent than to be told that the death of a child was the consequence of dentition. I have seen, in this city, a certificate of death, in which the direct cause of the death of a child five years of age, with his jaws full of teeth, was attributed to teething. Consider for one moment the absurdity of the conclusion that a normal, physiological process is fatal to the existence of a living being. Who has ever ventured to assert that menstruation, or pregnancy, or the climacteric years, are the direct causes of death? It is equally absurd to assert it of dentition; yet such statements are daily made by physicians. According to the census of England, in the year 1857, there were in the United Kingdom 3,992 deaths from teething, 3,791 of which occurred in children of less than two years; 201 in children of from two to five years. Between the years 1845 and 1850, there have died in London, according to the report of the registrar-general, no less than 3,466 infants from teething, and the disorders caused by the general irritation attending dentition; the total number of deaths from all causes being 258,271, giving the proportion of one death from teething to seventy-four from all causes. And the census of the state of New York offers the following numbers: In the whole state there died, in the year 1855, from teething, 626 children; of these certificates of causes of death, 254 were made in New York County, 132 in Kings, 35 in Erie, 24 in Rensselaer, 41 in Albany, 30 in Monroe. It is not stated whether a part of those unfortunate children who died from teething had not the full contingent set of teeth of first dentition.

Let me first state that teething, in the common acceptance of the term, is not the gradual development or formation of teeth, but the time and act of their penetrating the guma. This takes place, in the average, beginning from

the sixth, seventh, or eighth months to the twenty-fourth or thirtieth month of life. I may also in this place enumerate the symptoms which are often observed during, or (shall I say) in consequence of teething. In a large number there are no symptoms at all. The first, and the second, and perhaps all the other teeth, will cut, and without any disease or trouble of any kind. In others the mouth is hot and red, with the exception of those thin parts of the gums below which the teeth are visible; even the lips have a higher color and temperature; the child puts its fingers, or anything in its reach, into the mouth; is pleased with having its gums rubbed; bites the nipple when sucking; or if the mouth is inflamed and aphthæ are present, and the tonsils swollen, it is disinclined to take the breast, trying it often, but just as often losing its hold. At the same time there is a copious salivation, the saliva being usually tough, viscid, and more like mucus than saliva. The child has all the usual symptoms of slight or moderate fever; warm hands, a rapid pulse, flushed or pale face, intense thirst, vomiting, constipation, or diarrhoea with green mucous passages. The most common of these is diarrhoea. Pain in the bowels is very common, as digestion appears disturbed; tears are secreted abundantly; the bloodvessels of the conjunctivæ are injected. A slight cough, hoarseness, pain in passing the scanty urine, secretion from the nose, are not unfrequent occurrences. Such symptoms are apt to disappear entirely in three or four days or a week, with or without treatment. But sometimes the symptoms are graver from the beginning, or they are aggravated by endemic or epidemic influences, or the peculiarities of individual dispositions to disease.

In some cases the fever will not disappear so readily without leaving grave consequences; the pulsations of the heart and arteries will not decrease in number; the action of the heart will not be of less power and impetuosity than before; the tongue, mouth, and lips remain dry; thirst so extreme that you cannot take the tumbler from your little patient's hands before he has completely emptied it. Respiration is accelerated, numerous, short, and superficial. The eye is sensitive to the light; headache becomes manifest from the corrugation of the muscles of the eyebrows, and the peculiar aspect of suffering. Excretions and secretions are scanty, feces dry and hard, urine red. Vomiting and diarrhoea, if they had been present before, now cease. The child will appear more depressed, but easily excited; slight local convulsions will prove the introduction to severe attacks, which generally terminate fatally. In other cases the tongue is hard, dry, black; teeth and lips of the same color, corresponding with the symptoms characteristic of typhoid fever. Such cases are very likely to terminate fatally. The last symptoms in such cases are paralysis of some abdominal organ, especially of some part of the intestine. Another train of symptoms attributed to teething, is the following: A child is feverish; pulse frequent and small; temperature of the extremities considerable; but the face is pale from the beginning; lips and mucous membrane of the mouth hot, red, and dry; tongue covered with a greyish white fur; restlessness; anxiety; respiration hurried and short; vomiting and diarrhoea. Frequently such a depression of the general strength is combined with these symptoms—the more so as the most intense and often repeated vomiting and diarrhoea are very apt to exhaust the little patients—that the child dies in a day or two in convulsions consequent upon inanition, and local or general paralysis. In a certain number of cases the principal symptoms cease, and the child recovers. In a certain other number vomiting will stop, but the diarrhoea continues. The deluded mother who felt a little uneasy at the severe character which teething seemed to have assumed, is gratified, after the main symptoms have passed by, to find that her child is suffering from diarrhoea only, and that in this manner teething will be made easy and comfortable. But alas! this deception on the part of the mother is too often fatal to the child. The diarrhoea is allowed to go on for days and weary weeks; the digestion becomes hopelessly

destroyed; the abdomen immensely distended with gas; the mesenteric glands swollen and impermeable to chyme; the catarrh and over secretion of the glandular follicles of the intestine lead to deep ulcerations of the intestinal canal; the diarrhoea becomes also more frequent, serous, mucous, or bloody; the arms and legs of the little sufferer dwindle away; and the countenance becomes emaciated and senile. The scene closes with a consoling certificate from some doctor or druggist, affirming that teething was the cause of death. Thus millions of infants are destroyed by ignorant, prejudiced, and incorrigible advisers. I say incorrigible. I know that mothers will always consult their prejudices first, the prejudices of their neighbors next, perhaps at some late time common sense, and finally they may seek the advice of an educated medical man. I know that a mother who has just consigned a beloved child to the grave, will go home with throbbing heart, and repeat the follies which cost her the child she has lost. If you remonstrate with her for neglecting the second, as she did the first, she will reply, Was not the child teething? Would you prevent the child from teething naturally? Is not teething necessary? Was it her fault that the child got teeth with difficulty? The true inference would be that nature neglected much, and that it was greatly at fault in the matter of dentition. I once read the newspaper announcement of the death of a child, in which the parents, while inviting all their friends and acquaintances to attend the funeral, affirmed that "the Lord hauled the dear child up to heaven by the teeth." Now, in this case, neither the father nor mother was at fault.

I shall not, in this place, proceed to point out the other symptoms of diseases attributed, whether rightly or wrongly, to teething, as the symptoms of cerebral inflammations, of convulsions, of general and local paralysis. At a later period in this course of lectures, I shall return to these subjects for practical purposes. It will better answer my design to give you a sketch of what dentition is, anatomically and physiologically, in order to show clearly the normal and abnormal course it may take. I shall thus be able to explain and *limit* the numberless complaints generally attributed to teething. If I can relieve your minds of the impression that dentition destroys the thousands and even tens of thousands of innocent beings who are yearly sacrificed in reality to the prejudices of other times, I shall be abundantly satisfied.

CLINICAL LECTURES.

DELIVERED AT THE N. O. CHARITY HOSPITAL

BY AUSTIN FLINT, M.D.,

PROF. OF CLINICAL MEDICINE AND MEDICAL PATHOLOGY, IN THE N. O. SCHOOL OF MEDICINE.

LECTURE I.

ON PULMONARY EMPHYSEMA.

Embarrassed respiration and lividity not distinctive of Emphysema.—Mode of determining their true cause.—Existence of Pleurisy with effusion.—Anatomical characters of Emphysema.—Condition of the air-cells and tubes.—The condition of the lung explains the dyspnoea and lividity.—History of a case.—Its Treatment.

GENTLEMEN—In my last clinical lecture, I invited your attention to a patient in one of my wards who was suffering greatly from dyspnoea, and who presented considerable lividity of the prolabia and face. These were the most prominent of the symptoms in the case. The respiratory function was seriously compromised. The suffering in consequence was great, and the lividity showed incompleteness of the normal blood-changes which should be wrought by the interchange of certain elements with the atmosphere.

I stated to you that this patient was affected with pulmonary emphysema, and that the case would probably end fatally within a short time. This prognosis has been ful-

filled. Death took place the day before yesterday. The dyspnoea increased, lividity became more marked, and the patient died from asphyxia and exhaustion combined. The contents of the chest have been removed, and are on the table before me. I shall devote this lecture to some remarks on emphysema in connexion with the history of this case, and the morbid appearances presented after death.

The prominent symptoms in this case were embarrassed respiration and lividity. Now these symptoms are not distinctive of emphysema. We could not predicate on them the existence of emphysema. These symptoms are present in a variety of affections; they occur in certain diseases of the heart; in pneumonia when it extends over a large portion of the lungs; in acute phthisis; in pleurisy with large effusion; in capillary bronchitis, asthma, and obstruction of a bronchus. How did we arrive at the conclusion that the symptoms were not incident to any of these affections, but to emphysema? The history and associated symptoms enabled us to exclude readily some of them. The dyspnoea had existed continuously for too long a period to be consistent with the diagnosis of pneumonia, acute phthisis, capillary bronchitis, or asthma. Moreover, other symptoms which we should expect to find in connexion with either of these affections, were wanting. Thus, reasoning by way of exclusion, we could readily eliminate these; but the other affections named were not so readily excluded by the history and symptoms. It was necessary to call to our aid the results of a physical exploration of the chest. Having recourse to these, we were able to exclude without difficulty other of the affections. Disease of the heart, pleuritic effusion, and bronchial obstruction, were eliminated by finding certain signs wanting which should have been present, had these affections existed. In this way, we reached the conclusion that the prominent symptoms in the case were due to emphysema, employing a method of reasoning often extremely serviceable in the discrimination of diseases. But the diagnosis was rendered more complete by the presence of certain physical signs which positively denoted the existence of emphysema, and the examination after death has verified the correctness of the diagnosis.

Let me now direct your attention to the anatomical characters of emphysema, as presented in the lungs before me. But before speaking of these, I will refer you to certain appearances which show that at some period of the life of the patient, not very recent, he was affected with pleurisy. This is a fact of interest, since it is very probable that the attack of pleurisy may have had something to do with the production of the emphysema. In removing the lungs from the chest, they were strongly adherent to the thoracic walls on the left side, and entirely free from adhesion on the right side. You observe that the whole of the left lung is invested with a firm false membrane, which is attached to the visceral pleura by an adventitious structure resembling the areolar tissue. Over the lower part of the lung the false membrane is thick and leathery, and on slitting it up, several ounces of a puruloid liquid escape. This liquid is exterior to the lung, being situated between the false membrane and the pleura covering the lung. It is the residue of a liquid effusion which was probably large when the patient was affected with pleurisy, before the pleuritic adhesion had taken place. This liquid still separates the false membrane from the visceral pleura in some small spaces. Directing attention to the lungs, you perceive that they are notably voluminous. In a healthy chest, when it is opened, the lungs, if not adherent to the thoracic walls, collapse more or less, leaving a vacant space between them and the walls of the chest. The lung in this case was not collapsed on the right side, in which no adhesions existed. It is now two days since the organs were removed, and still, as you see, their volume is remarkably large. They look as if they had been artificially inflated. This is one of the characters of emphysema, the special anatomical condition consisting in permanent dilatation of the air cells. The lungs were abnormally expanded during life, owing to the dilatation of the chest. They remain so after death. The

elasticity belonging to these organs in health is so much impaired that the expanded volume continues, notwithstanding they have been handled considerably, and if suspended they would retain much of their present volume until dried. Another of the characters belonging to lungs affected with emphysema is an exsanguine appearance. They appear to be absolutely devoid of blood. Even in the posterior portions, which are usually found to be congested after death, the vessels seem to be empty. This represents, to some extent, a morbid state, existing, as we shall presently see, during life. Another character is a doughy or cushiony feel, which you will find to be well marked in this specimen. Another character is a remarkable dryness of the tissues; when a section is made no liquid escapes, and very little is squeezed out by pressure. These are the obvious characters of emphysema. On close examination of the cut surfaces, in some specimens, the cells are seen to be enlarged, and sometimes cavities greater or less in size and more or less numerous, are apparent. These are caused by destruction of the cell walls and coalescence of the cells. They are especially conspicuous in dried preparations. I have a beautiful specimen of this description which I obtained in this hospital last winter; the lungs presenting, on section, an appearance of these organs in the batrachian species of animals. Cavities of large size are occasionally produced by coalescence of the cells. These appearances are not presented in this specimen. The cells seem to be simply and uniformly dilated.

Emphysematous dilatation may be limited or diffused over the whole lungs. In this specimen it extends over the whole of the right lung, but is relatively greater in the anterior and superior portion, as is usually the case. On the left side it extends over the whole upper two-thirds of the lung, and the lower third, instead of being expanded, is contracted. On cutting into this contracted portion, the substance of the lung is found to be condensed. It is carnified, and contains, for the most part, no air. This appearance claims notice as perhaps having a bearing on the production of the emphysema. On making repeated sections into the carnified portion of the lung, I find an oblong, irregular cavity, which appears to be lined with a membrane, from which I scrape a bloody, mucous-like substance. This has not the appearance of a tuberculous cavity. It is probably a dilated bronchial tube. I find no tubercles present anywhere. The bronchial glands are enlarged. Here, at the bifurcation of the trachea, on each side, is an enlarged gland the size of an almond. On cutting into it an abundance of carbonaceous matter is apparent.

Let us observe the condition of the air tubes. Following the trachea to the bronchi, and the sub-divisions of these as far as they can be traced, they present no appearance of contraction or obstruction. The mucous membrane everywhere is covered with a thick layer of mucus. When this is scraped away the membrane is intact. On the right side the membrane is reddened. The membrane seems to be thickened, but it is consistent, and there are no ulcerations.

The heart has been removed, attached to the lungs by its vessels. It is about the normal size. I open the cavities. The walls are about the normal thickness, and present the appearance of healthy, muscular structure. All the cavities contain some loose, soft, black coagula, and each ventricle contains, also, a colorless clot intertwined with the tendinous cord, and from the left ventricle projecting for several inches into the aorta. These clots suggest remarks which I defer for some other occasion. All the valves of the heart are sound.

Reverting to the condition of the lungs, can we explain the rationale of the prominent symptoms in the case, viz. the dyspnoea and lividity? By reference to this condition, a little attention will, I think, render the connexion sufficiently intelligible. The effect of a permanent dilatation of the air cells is an abnormal expansion of the lungs during life, continuing, as we have seen, after death. Owing to the loss of elasticity, the lungs no longer collapse in the absence of a force producing their expansion. What is the

effect upon the respiratory movements? The range of the expansion of the chest is diminished. The permanently expanded lung, in the first place, limits the expiratory movements; the chest contracts less with the acts of expiration, and, consequently, the inspiratory movements are restricted. The chest is habitually in the state of an inspiratory act partially performed; or, in other words, the expiratory act is habitually performed incompletely. You see, with a moment's reflection, that in this way the range of the alternate expansion and contraction of the chest in the alternate acts of inspiration and expiration, is diminished in proportion to the extent of the permanent expansion of the lungs. I can illustrate the point which I wish to explain by this pair of bellows. I separate the handles of the bellows as widely as possible, and thereby draw in a certain quantity of air; then I bring the handles as near together as possible, and I expel the air from the bellows. It is true that the comparison is not exact, because the chest is never so completely voided of air as the bellows, but the parallel is sufficient for the illustration. Now, suppose there is some obstacle interposed to prevent the approximation of the handles of the bellows, and the air is consequently expelled in part only, the range of the blowing capacity in the bellows is evidently diminished just in proportion as the expulsive movement is prevented. In an analogous manner the permanent expansion of the lungs in emphysema, by opposing an obstacle to the movements of expiration, restricts the extent of breathing capacity.

How does this compromise the respiratory functions? There is no deficiency of air within the cells of the lungs. An over abundance of air, in fact, belongs to the morbid condition. But it is residual or stagnant air which is abundant. The volume of moving or tidal air, in the acts of inspiration and expiration, falls below the quantity required for the function of respiration. The respiratory function is dependent on a sufficient quantity of moving air. This being inadequate, the blood fails to receive from the air inspired a sufficient quantity of oxygen, and the expired current fails to carry away from the blood a sufficient quantity of carbonic acid gas. Hence the interchange of these elements between the blood and the atmosphere is incomplete. Dyspnoea and lividity are incidental to the imperfect accomplishment of the respiratory function. The patient feels a painful sense of the want of fresh supplies of air. This constitutes the symptom called dyspnoea. Impelled by this suffering from the want of air, he instinctively employs laborious efforts to obtain it. Hence are called into play all the muscles which enlarge the capacity of the chest in the act of inspiration, and which compress the lungs by contraction of the chest in the act of expiration. But if emphysema exist to such an extent that the most laborious efforts of breathing are insufficient to satisfy the objects of respiration, not only does the dyspnoea continue, but the imperfection of the blood changes which should be wrought by the respiratory function, are manifested by lividity in parts where the vermilion hue of arterial blood is conspicuous in health, viz. The prolabia, the mucous membrane within the mouth, and, to some extent, the cutaneous surface, especially on the face.

There is another mode in which emphysema compromises the respiratory function, viz. By impeding the circulation of the blood through the lungs. I have pointed out the exsanguine appearance in the specimen on the table. For the same reason that the lungs are exsanguine after death, the blood is deficient in these organs during life. The air in the dilated cells compresses the capillary terminations of the pulmonary artery, and in this way obstructs the passage of blood through the pulmonary circuit. The function of respiration, therefore, suffers from the want of a sufficient supply of blood to the lungs, as well as from the want of a sufficient supply of fresh air. This obstruction to the circulation through the lungs necessarily leads to an accumulation of blood in the right cavities of the heart, and to stagnation in the systemic

veins and capillaries. The lividity is partly attributable to this stagnation, as well as in part to deficient oxygenation of the blood. As a result of an accumulation of blood in the right cavities of the heart, they become distended and enlarged, and ulterior effects which may occur are cardiac hypertrophy and dilatation.

If the anatomical condition which constitutes emphysema be understood, together with the mode in which it compromises respiration and interferes with the circulation, the symptomatology of the affection will be sufficiently intelligible. The signs obtained by the physical exploration of the chest are also understood without difficulty. I do not propose to enter into a consideration of these at this time. I shall consider them in connexion with other cases of emphysema which will come under our observation during the winter. I will simply say that you have only to keep before the mind's eye the permanent expansion of the lungs as you now see them, to understand that, when situated within the chest, the latter will be enlarged in proportion to the increased volume of the pulmonary organs; that the normal oblique direction of the ribs will be diminished in proportion as the thoracic walls are elevated and expanded, and the direction will approximate to a horizontal line; that the costal movements will be less than occurs in labored breathing in health; that, inasmuch as there is no deficiency of air in the air cells, the chest will be sonorous on percussion, and that, since the range of movements of the lungs and chest is diminished, the respiratory sound obtained by auscultation will be weakened. There are certain modifications of the form of the chest, of its motions, of the percussion note, and of the rhythm of the respiratory murmur, which constitute positive physical signs of this affection. These, I shall point out to you on other occasions.

I will now give from my Hospital Book a condensed account of the previous history of the case which has served as a text for this lecture, together with the symptoms and physical signs. I shall not stop to offer any comments, but I shall afterwards devote the remainder of the lecture to some remarks on the pathology and treatment of emphysema.

The patient, a laborer, aged 36, was admitted into the hospital fifteen days before his death. He had been in the hospital eleven days when my time of service commenced. He stated that he was well and strong up to two years ago. He then began to notice deficiency of breath on active exercise. About the same time (he was not certain whether shortly before or after) he began to cough and expectorate. The deficiency of breath, cough, and expectoration progressively increased, but he kept at work until August last, when he was obliged to give up. He did not take to the bed till he entered the hospital. When he entered he was greatly prostrated. The lower extremities were oedematous. The dyspnoea was urgent. He was treated, before he came under my charge, with the syrup of morphia, brandy, good diet, and occasionally the brown mixture. His condition became, in some respects, improved. The cedema of the lower extremities disappeared. He seemed less prostrated.

When I took charge of the patient, the cough was frequent and spasmodic, and he expectorated abundantly muco-purulent matter. The breathing was greatly labored, the inspirations spasmodic, the respirations numbering 36. The face and lips were tumid. The prolabia and tongue were livid, and the face also presented a livid hue. The appetite was good and the bowels regular. The pulse was 120. The surface was cool. The dyspnoea did not prevent him from lying down, and he preferred to lie on the left side.

On physical examination of the chest, the ribs and sternum were raised in inspiration, as if they formed one piece. The larynx descended in each inspiration. The chest presented at its upper part a barrel shape. The lower part was contracted in inspiration. The obliquity of the ribs was diminished. The percussion sound was

everywhere clear. The resonance extended over the præcordia. The sonorousness was not great, but the chest was pretty thickly covered with muscle. The respiratory murmur in front, on the left side, was extremely weak. The inspiratory sound was notably deferred. On the right side, the respiratory murmur was less weak, the expiratory sound prolonged and lower in pitch than the inspiratory. Behind, the murmur was scarcely perceived on the left side, and was feeble on the right side. Sibilant râles were frequent on both sides, and, here and there, mucous râles. The apex-beat of the heart was not discoverable. An obscure impulse was felt in the epigastrium just below and to the left of the ensiform cartilage. The heart sounds were scarcely audible in the præcordia, either at the situation of the base or apex. Both sounds were heard in the epigastrium, the second sound being louder than the first. No cardiac murmur was discovered.

The urine was not albuminous, and I may state in this connexion, that the kidneys after death presented a normal appearance.

My treatment consisted of the chlorate of potassa, half an ounce daily, the syrup of morphia *pro re nata*, brandy three ounces three times daily, and good diet.

The labor of breathing and the suffering from the want of breath continued. The lividity increased, and death took place on the fourth day after the patient came under my charge.

Original Communications.

DIPHTHERIA, AS REGARDS ITS SPECIFIC TREATMENT.

BY WM. MASON TURNER, M.D.,

OF PETERSBURG, VA.

As this dreadful malady has not yet disappeared from our land, but continues to rage in different sections of the country, indiscriminately, I deem it not amiss to spread before the profession a plan of treatment which has proved eminently successful in this region. I beg to assure my medical confrères that I do this without the slightest egotism; I give the treatment not altogether as my own, but wholly with the idea of alleviating some of the ills of humanity—resultants of diphtheritic affections—and of adding a willing mite towards removing the sufferings of the people. I have chosen, for good reasons, the AMERICAN MEDICAL TIMES, as a most fitting organ through which to make known the peculiar views which follow.

It is not my purpose to go into the etiology, nature, origin, similarity in points of resemblance with other diseases, etc., etc., of diphtheria. All of these points I have fully discussed, as far as my ability enabled me, in a recent number of the *Charleston Medical Journal*. In that article I gave a history, in epitome, of diphtheria from its first appearance, until some twenty-two months ago, in the State of New York, it again showed itself, a most fatal and malignant scourge. I shall not dwell here, then, longer than to state generally that I think the disease is owing to malarial influence, and that it is essentially a blood-poisoning, with a great degeneracy and breaking down of the vital forces—antithetical, in fact, to sthenism, which is only present in local inflammatory points. I deem it necessary to state this much in defence of my treatment; rather, I should say, in defence of the treatment generally followed here and throughout Virginia. At this point, I may as well say that I do not now by any means agree with the views I entertained and expressed in the article written for the *Charleston Journal*. I refer wholly and emphatically to the opinions I then held concerning the treatment. Suffice it

to say for the present, that I then discarded all specifics, and clung pertinaciously to general principles; clung so pertinaciously, in fact, and with such a strong faith in my remedies, that I buried several of my patients before I relinquished the old plan, and sought safety in specifics. To this, however, I may refer again in this paper.

The treatment of diphtheria, like the treatment of most other diseases, is dependent on a multitude of circumstances; on the condition of the patient when seen by the physician—on his means for providing proper sustenance—on the attention he receives—on the peculiar situation in which he may be placed as regards wet or dry localities—on the temperament of the patient—on constitutional tendencies and attributes, etc. Yet, speaking generally, we may materially reduce these circumstantial conditions, and arrange our treatment according to the time we see the patient, that is, for diphtheria in the early stage, and diphtheria in the advanced stage. The treatment for the early stage is the same as should be employed in the advanced stage; yet, owing to physical obstacles, the treatment has to be varied for the latter. When I first encountered diphtheria, I was led to treat it as I would have treated any case of ordinary angina, or any case of local and general inflammation. Depletants, mercurial alteratives, leeches, blisters, caustic and compound sage gargle, constituted my treatment. There is no denying that the greater portion of my patients recovered; yet, knowing what I do now concerning the affection, I cannot attribute their restoration to health entirely to my remedies. Those patients, in whose treatment I employed mercury and local depletants, fared worse; where I did not use mercury and local depletants, I did not lose a case. I was thus led to study more minutely the disease, and its train of many singular symptoms. This study convicted me of the error of my treatment, and solved some of those inexplicable terminations which I had often observed with astonishment in my practice. I soon determined that the disease was ultimately asthenic, and from this one fact, I derived a basis for what I consider sound treatment.

Without referring to this further, I will come to the subject in hand. When I am called to a patient with diphtheria, I immediately put that patient, *anemic* or *plethoric*, on tonic treatment—tonic, both so far as regards medicines and nutriment. It matters not what may be the contra-indicating symptoms, I always direct tonics; even, in fact, if the pulse is 125 to the minute. My success bears out the treatment. At the same time, I institute the *disinfectant* or *chlorine treatment*. With these combined, alone—the tonics and the disinfectants—and without the aid of caustic and washes, I am almost confident of success. I do not mean to say by this, that I ignore *gargles*; far from it; in conjunction with the internal tonic and disinfectant treatment, I always employ gargles, and gargles of a disinfectant nature. I studiously avoid probangs; I look upon them as instruments of torture and of death. I know I have seen cases which died from the constant mopping to which the throat was subjected. Mopping has only one effect—that of stimulating the surfaces, causing them to throw out the false membranes more vigorously than ever. I have used the probang and the different washes, caustic and stimulant, and never experiencing any success from their employment, I now discard them altogether. When the diphtheritic membrane is confined to the buccal region, hard and soft palate, and lips, I often employ, by direct application, equal parts of ol. olivæ and spir. terebinth.; I never scrub the parts, however, with the liniment. I give explicit directions that it shall be applied with a *soft rag*, and touched very gently.

Under the head of tonics, I use quinia and iron chiefly. I prefer the tinct. ferri muriat. much above all other tonics. In more advanced stages, where deglutition is impossible, I employ nutritive enemata, to which I add a large proportion of sulph. quiniæ. Under the head of disinfectants, I give potass. chlorat. chiefly and almost wholly. I have employed, with decided advantage, sulph. quiniæ and chlo-

rate of potass., jointly, in powder. But a more favorite mode of combination with me is to order a solution of potass. chlorat., and give with it the tinct. ferri muriat. in doses to suit adult, boyhood, or infantile age. As a gargle, I like none better than the following:

R Potass. Chlorat. 3 jss.
Tinct. Myrrh. } aa 3 ss.
Mel. Boracis. }
Hydrochlor. Acid. dilut. gtt. xv.
Aque font. § iv.

M.—S. Use often.

Or simply,

R Labarraque's solution § ij.
Aque puræ § viij.

M.—S. Use often.

I generally direct a flannel rag, saturated with ol. terebinth., to be placed around the neck. With all of this treatment, a highly nutritious diet is almost indispensable—oysters, broths, beef, mutton, and chicken teas, port-wine, good brandy, etc. A proper attention should also be given to the *primæ viæ*. I never administer emetics, save in the *very earliest* stages. For more advanced cases the same treatment is applicable, and when the œsophagus is no longer able to perform its office, the medicines and diet, substantially as directed above, must be exhibited by the rectum. The gargle, made with Labarraque's solution and water, in such cases, can be syringed with advantage into the nasal cavities, and into the mouth and throat. The entire treatment may be thus concisely summed up—*Tonic and disinfectant* (the latter internally and topically), all combined with rich diet. Best tonics—sulph. quiniæ and tinct. ferri muriat. Best disinfectants—potass. chlor. and acid hydrochlor. dilut. Best local disinfectant, in form of gargle—Labarraque's solution et aqua pura, or any gargle in which, with other ingredients, a disinfectant bears a large proportion. Such is the treatment which we usually follow here. Such is our reliance on it, that in *nine out of ten cases of diphtheria*, we consider the prognosis as favorable. With the hope that some of the medical brethren, especially at the North (for it is in substance adopted in the South), will give this treatment a fair trial, I lay it, with all due respect, before the profession at large.

Clinical Record.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROF. PARKER AND MARKOE'S CLINIC.

November 13, 1890.

CASE XI.—*Enlarged Testicle*.—A. B., æt. 37 years, states, that twelve years ago, six months after connexion, he had a chancre which was healed at the end of two weeks: he has never suffered from secondary symptoms of any kind, and now presents himself with an enlargement of the right testicle which commenced three months ago. He has always been temperate in his habits, and, though quite pale, considers himself in pretty good health. His lungs are sound, and his family has always enjoyed good health, with the exception of his mother, however, who died of carcinoma. The tumor is pyriform and heavy; the scrotum is perfectly healthy; the condition of the cord is wholly normal. On placing a lighted candle behind the tumor, that peculiar translucency, which is diagnostic of hydrocele, is observable. The quantity of water within the tunica vaginalis is not large; the hard heavy testicle can be easily felt.

Diagnosis.—In this case there is disease of the testicle, complicated with hydrocele, which last is not a disease by itself, but is symptomatic of the first: our attention is therefore directed to the testicle. This cannot be a syphilitic affection of the organ; the history of the case precludes

such a conclusion; it is probable that the sore, which the patient describes as having occurred six months after connexion, was an accidental inflammation destitute of a specific character. Nor is it dependent upon any urethral disorder, for the canal has always been healthy. If the disease were cancerous in its nature, the cord would be enlarged, and there would be greater vascularity of the parts adjacent to the testicle. There is a simple chronic form of orchitis, which is usually referable to a blow, a strain, or undue pressure of the organ; but there is no such exciting cause in this case. This is probably a scrofulous inflammation of the testicle, commencing in the epididymis, involving the testes. It consists in the effusion into the substance of the organ of imperfectly organized fibrine, which gradually enlarges, and finally ulcerates, through the scrotum, forming a fungous protrusion, and ending, not unfrequently, in the complete disorganization of the whole testicle.

Treatment.—The plan of treatment is that which was devised long before the use of iodine was ever known; it is alterative and tonic in its character. Reliance is to be placed upon nourishing food, and the alterative action of hydrarg. bichlorid. united with some tonic preparation, such as tinct. cinchonæ co., or syrup. ferri iodidi. This patient will probably derive much benefit from the administration, three times a day, of a pill containing hydrarg. bichlorid. $\frac{1}{2}$ gr., ext. conii, ii. gr.; also, after each meal, syrup. ferri iodidi, xv–xx. gtt.

A mild iodine ointment may be employed locally; the accumulation of water in the tunica vaginalis requires no specific attention.

November 19, 1890.

TRAUMATIC STRICTURE OF URETHRA. FISSURE OF THE PALATE. ABDOMINAL PARALYSIS.

PROF. MARKOE.

CASE XII.—*Stricture of Urethra*.—James C., æt. 24, on the 22d of September last stepped upon the cover of a coal-hole in the sidewalk, which, turning, threw him to the ground, striking his perineum with great violence against the sharp edge of the cover. This injury was followed by considerable swelling of the contused parts, and he was unable to pass his water until a catheter had been introduced, when there came from it both urine and blood. The catheter was allowed to remain in the bladder for two weeks, during which time the swelling had gone on to suppuration, and through the opening came the contents of the abscess and urine. This opening has not healed, and he passes water in a very small stream and with increasing difficulty. Through the integument, just beneath the arch of the pubes, a portion of the urethra can be felt thickened and indurated, through which even a small-sized instrument cannot be passed.

Remarks.—This case presents, in the first place, a contusion of the perineum and urethra at the point most liable to be injured by external violence, viz. just beneath the arch of the pubes, where the urethra curves under the bone. The contusion was followed with consequent disintegration, leaving a fistula communicating with the urethra, which has contracted as the process of healing has gone on, thus producing the most intractable form of stricture.

Treatment.—This consists in dilating the stricture by means of metallic sounds or bougies, or in dividing it, and allowing the process of healing to take place over a catheter left in the bladder. In this case, from the difficulty experienced in passing an instrument, the stricture will probably require division in order to effect permanent relief.

CASE XII.—*Fissure of the Palate*.—A. B., æt. 14, was born with a fissure of the palate, which appears as a V-shaped cleft in the velum pendulum. There is but little deficiency in the hard palate, yet the deformity is sufficient to impair the speech, and the deglutition of liquids is somewhat difficult.

Shall the patient subject himself to an operation for the

relief of this condition? The operation would consist in bringing together and maintaining in contact the freshly pared edges of the fissure—an operation which is both difficult and dangerous. Either cannot be given in these cases, and the patient's sufferings must be prolonged through two or three hours of operative interference. The palatal muscles, moreover, are imperfectly developed, and cannot perform their appropriate functions, even though the operation should prove successful in its immediate results, so that the speech of the patient is scarcely improved. In this case, there is little deficiency of the bony palate, and, if the operation could be endured, a gradual improvement of the speech might be hoped for; but, considering his youth, the patient should wait till he arrives at years of maturity, when his powers of endurance will be greatly increased.

Traumatic fissures of the palate may be operated upon with perfect success. Yet, even then, the paralysis of the palatal muscles is so persistent that in a case of six weeks' standing, in an individual thirteen years of age, it was six months after the operation before the power of articulation was perfectly restored.

PROF. PARKER.

CASE III.—Abdominal Paralysis.—This child, two years of age, is suffering with partial paralysis of the left leg. It is a case of abdominal paralysis, or dental paralysis, as it is sometimes called. It occurs, for the most part, in children during the period of dentition, and is dependent upon irritation of the alimentary tract, caused by the eruption of the teeth, or by the presence of some offending body in the stomach or intestines. The paralysis is preceded by symptoms of general irritation, and usually makes itself suddenly manifest. Sometimes it involves the leg and arm of the same side; but it more frequently involves the leg. The disease does not affect the encephalon; it has its origin in the alimentary canal, and is reflected to the limbs by the spinal cord, as was shown by Marshall Hall. It is of more frequent occurrence in the summer than in the winter, because the bowels are then most liable to disturbance.

Prognosis.—Some of these cases recover entirely; many never recover; and if the children live, they grow up with shrunk and powerless arms or legs. This little child appears to enjoy good health, and the paralysis of her limb is so inconsiderable, that we may hope for a perfect recovery.

Treatment.—The treatment of these patients is simple: In the first place, remove the exciting cause—clear out the stomach and bowels. Some form of mercury should always enter into the composition of the purgatives used. The diet should be carefully regulated; the back should be showered with hot water, followed by cold. Dry friction should be applied to the limbs, and tinct. iodine may be rubbed in along the spine. Some form of iron may be administered internally, and with it may be united tinct. nuc. vomice, as soon as innervation begins to manifest itself in the atrophied muscles. Later in the course of treatment advantage may be derived from the use of strychnine and electricity; but these are agents which should never be employed while the existing causes of paralysis remain; they are nervous assistants, and are not to be used until all congestion or inflammation has been removed, and the nervous system is brought into a proper condition for the performance of its appropriate function.

November 26, 1860.

DR. MARKOE.

EPITHELIAL CANCER.

CASE XV.—Epithelial Cancer of the Scalp.—Margaret B., set. 77, had for many years an encysted tumor of the scalp, occupying a position a little anterior to the left parietal eminence of the skull. Three years ago, this tumor was accidentally bruised; a chronic inflammation of its structure was excited, and, at the end of two years from the time of the accident, it opened and discharged a quantity of bloody

matter. Since then there has been at that point an open sore, which now occupies a surface of three inches in diameter.

Diagnosis.—This is an excellent example of epithelial cancer of the scalp. This form of disease exists almost invariably upon epithelial surfaces, as the lip, the back of the hand, the scalp; and, though sometimes extending to deeper tissues, it is usually confined to those surfaces. It sometimes springs up *per se*—without apparent cause; it sometimes takes its origin from a wound; sometimes it is developed in old scars—it is, in fact, the peculiar cancer of scars: in this case it occupies the site of a wen. Epithelial cancer sometimes grows as a subcutaneous tumor, but this is not as common as in the other varieties of the disease. It usually ulcerates at an early period, producing an excrescence with everted edges, and a warty, cauliflower appearance. Its structure consists of a mass of epithelial scales, of irregular shape, size, and arrangement, loosely aggregated in a fibrous stroma. There are no true, superficial granulations, but there is a raw surface, from which exudes a thin, serous fluid, and upon which are many imperfect, thin-walled vessels which bleed very easily.

Remarks.—This form of cancer enlarges principally by extension at its edges. It is not as painful as other cancers, is slower in its progress, and the adjacent glands are not as apt to be affected: the prognosis is also more favorable. The constitution is less apt to be impaired; yet, after ulceration has occurred, the cancerous cachexy usually manifests itself, but is not often attended by great emaciation. The blood is much impoverished, and the skin becomes yellow from imperfect elimination of the bile. As the case advances the limbs swell; ulceration progresses; weakness increases; and the patient dies.

Treatment.—The removal of this form of cancer gives more hope of cure than in the other forms of the disease: the patients survive longer after operation, and are more frequently cured. But in this case an operation is contra-indicated by at least three reasons: 1. The cancerous cachexia is already fully established; 2. The disease is so extensive that its removal would leave an open sore which could not be healed for many months, greatly increasing the probability of its return; and, lastly, the subjacent bone appears to be involved. The only thing that can now be done is to palliate the sufferings of the patient. If there is much pain, relief may be obtained from the use of opium. The extension of the disease may be hindered by the use of mild astringent ointments; and the offensive discharge may be checked by strong solutions of tannin or acetate of lead. The anemic condition of the patient may be somewhat improved by good diet, and moderate use of alcoholic stimulants, with a little iron and tinct. nucis-vomicæ, thus alleviating the symptoms, and, perhaps, prolonging her life for a few weeks or months.

CASE OF TWINS, ONE OF WHICH WAS BORN ENVELOPED IN THE MEMBRANES. By E. W. WOODSON, M.D., of Woodville, Ky.—I was called, August, 1859, to see a negro woman who had given birth to twins. The second child was born enveloped in the unbroken membranes. The midwife who attended the case, supposing the child to be dead, deposited it in a vessel without rupturing the membranes, and set it away until I arrived, which was at least fifteen minutes after the delivery.

As soon as I entered the room she related what had happened, and presented the vessel for me to inspect. I at once ruptured the membranes and found the cord still pulsating. I removed the child and succeeded in resuscitating it by using friction, artificial respiration, etc. I allowed the cord to remain untouched as long as it pulsated. The child was perfectly livid and apparently dead when I commenced to work with it. The breathing was at first gasping and at long intervals, but finally became regular and quiet. The child lived and did well.—*American Journal of the Medical Sciences.*

American Medical Times.

SATURDAY, DECEMBER 8, 1860.

ANÆSTHETICS IN CRIME.

THE discovery of anæsthesia is one of the grandest triumphs of man over the infirmities of a mortal nature. It is a contribution to the humanitarian progress of science, before which all mankind bow in undissembled gratitude. Whether rich, whether poor, whether learned or whether ignorant, the same doom of suffering and dissolution is equally entailed upon all. And happy must he be who can, in the midst of this wilderness of physical suffering, and when the arrow of mortal anguish is planted in his own bosom, turn to a fountain whose waters never fail to soothe present pain, nor to blot from the tablets of the mind the memory of a terrible ordeal. Since the auspicious day when this Lethæan agent and minister of good works was born among us, operative surgery has walked with a more triumphant step through the devious paths of her sorrowful domain. No longer hanging in terror over the suffering subject of congenital deformity, of accidental mutilation, or of chronic disorganization, the surgeon now comes as an instrument of grace to touch, to heal, but not to wound, the sick. Being twice as welcome, he is twice as successful as before, and leaves his patient wrapt in wonder at the painless issue of that ordeal whose suffering has not extended beyond his imagination.

Such, in its noblest aspects, is anæsthesia, and such the humane, beneficent part it is destined to play in the hands of its legitimate dispensers. Could its use be solely confined to them, we should have no occasion to write about it under the text which forms our prefix. We should find no reason for suspecting that it would play a double part in our social as well as our physical economy, and be made the instrument of crime, not less than the messenger of mercy. It seems now, however, that human depravity, subsidizing all acts to its sinister purposes, has prostituted the merciful hand of anæsthesia to the basest of uses. And to-day it stands ready to become, by no unreasonable stretch of the imagination, a fountain pouring out both sweet and bitter waters, or better still, perhaps, a fitting similitude to that beech-tree in the Georgic, which

"High as his topmost boughs to Heaven ascend,
So low his roots to Hell's dominions tend."

Nevertheless, we must remember, that the abuse of a virtue, or a principle, is no argument against its cultivation or dissemination; that the depraving of virtue does not justify us in ignoring or extinguishing such a principle, but that, once knowing it to be good and able to do good, we are under every obligation to cultivate it, although bold, bad men should pervert it to their own selfish ends. As physicians, we are in duty bound to do everything to promote any and every discovery in the principle of anæsthesia, while as good citizens we are equally under obligation to warn all of the dangers to which a prostitution of this principle exposes them. In doing this we act on the score only of prevention, and with little hope of working any cure in the department of criminal jurisprudence. Our

duty ends when we have pointed out the evil, as well as some of the medical errors into which tribunals may fall—have fallen, in fact, in endeavoring to redress the personal wrongs flowing out of it.

That resort should be had to anæsthetics in the perpetration of burglaries, larcenies, or homicide, is easily enough conceived. Long before the discovery of anæsthesia proper, victims to the above-named offences were drugged into insensibility with preparations of opium introduced into liquor. And even at the present day, the clumsier sort of villains, the Burkes and the Hares of our metropolitan purloins, are wont to carry into effect many of their nefarious operations by the assistance of narcotics. This is so well known that the designation "drugged liquor" is instinctively associated with the idea of criminal design, and the places in which such drams are supposed to be concocted are avoided by even the lowest class of pot-house bacchanals.

Now there is a design—aside from the greater facility afforded for the perpetration of crime by the aid of narcotics—which must not be overlooked in their administration. It is this: The chief witness to the transaction being deprived of consciousness at the commission of the offence, becomes incapacitated to testify on the trial of the offender. As he has never *mentally* witnessed the crime, and consequently had no memory of its history, he can have nothing to say about it. His body may exhibit wounds or marks,—his clothes may be soiled or torn, his wallet or his watch may be gone—but that gives him no special ability to identify any one in particular as his robber or assailant. He has seen nothing of the occurrence of which he is the subject, and his testimony is utterly worthless without corroborating and extrinsic circumstances, sufficient to make out a case, independent of any *ipse dixit* of his own.

From this just rule of evidence, Courts have, however, widely departed in cases involving the administration of anæsthetics. For some good reasons, which, we are inclined to think, have no foundation in physics, and should not be tolerated in law, witnesses have been allowed to testify to the occurrence of facts happening while they were in a state of anæsthesia, to which they would not have been deemed competent to testify, if in a state of narcotism. Popular conceit associates with this latter an idea of stupefaction, which it does not attribute to the former. This, undoubtedly, arises from gross misapprehension of the effects of etherization upon the organ of the mind. For it is evident to all who have investigated the results of narcotism and etherization, that their teleological effects are analogous in kind, if not in degree, and that either, when pushed to an extreme limit, terminates in coma. Supposing, therefore, either state to be a *complete* one in itself, why should any difference be made between them in the competency of a witness to testify? Do not both nerve action and sentient action equally cease in such case? And if we admit cutaneous anæsthesia to be simply the exponent of a true cerebral anæsthesia already existing, during which dreams may possibly occur, but during which, also, no report of cutaneous, or even nervous stimulation, can be considered as developing a correct mental conception, how can we safely admit, as a corollary to this proposition, that what then occurs is sufficiently impressed upon the mind to be made the subject of memory and recreation? Memory depends solely upon attention, and how can he possess any power of attention who has no

power of will by which to command it? A man robbed while under the influence of drugged liquor is not usually deemed competent to testify to the occurrence; but a woman drugged with ether is deemed competent to testify to a rape committed upon her. Is this a correct distinction to make? The fact is well observed that the psychophysical sensations, especially those of an erotic character, are very apt to be excited by the inhalation of ether. Such being the aphrodisiacal tendency of the anæsthetics, ought not Courts to see that proper allowances be made therefor in accusations of rape by a party under their influence? Surely the trial and conviction of Dr. Beale, in Philadelphia, sufficiently exposes the danger to which a large class of professional men are exposed, by the erotic excitement so frequently developed in female patients while under etherization. Once admit the competency of an etherized patient to accurately remember, and afterwards testify to the objective features of a supposed outrage upon her person, and you open the doors to a flood of most unjust, because most unreliable, evidence. In a state of complete etherization, whatever sensations exist must be purely subjective, and as such, should be allowed to have but little objective force.

On the other hand, and admitting the criminal uses to which the anæsthetic agents may be put, as instruments for masking the perpetrators of wrong, is it not incumbent upon the legislature to ordain that their sale, like that of poisons, should be restricted within the narrowest possible limits? If it can be shown that they are among the most subtle of agents in assisting at the commission of outrages upon the rights of persons, is it right that they should be indiscriminately sold to any and all who may apply for them? It is only necessary to have it known how efficient they are in overcoming individual sensation, and blunting individual perception of occurrences—stupefying, but not necessarily endangering life—swift to act, and leaving few or no traces of their action in the system—it is only necessary to have this generally known, and we shall soon see a new phase of criminality among us. Believing, therefore, that to be forewarned is to be forearmed we earnestly call the attention of our profession, and the public authorities to these new aspects of this enchanting and Lethæan distilment.

THE WEEK.

The Quarterly Report of the Superintendent of Police of New York, dated Nov. 1, contains some facts of special interest relating to public health. The *Sanitary Company*, organized in the spring, proves to be by far the most efficient Health Body in our city. Sergeant Lord at the head of his Squad has, in fact, done more for the public health during the summer than all of our other health organizations combined. While the City Inspector has squandered hundreds of thousands of dollars upon political dependents upon his alms, and the Commissioners of Health have held their sessions with closed doors that the community might not witness their idleness, the Sanitary Company of the Police have been on the alert, visiting the abodes of crime and wretchedness, seeking for and removing the causes of disease, and guarding with vigilance the public markets. We have watched the progress of this Company during the past season with great satisfaction, and believe

it deserves unqualified praise. The following extract will show with what vigilance its duties were performed:—

"The New York report shows there have been 4,562 cases subject to their supervision acted on, consisting of overflowing sinks, filthy houses, yards, cellars, areas, &c., unsafe buildings, &c., of which 841 of the nuisances were abated by the department, and 3,721 by the owners, under the orders of the department. There were 1,074 steam boilers examined, of which number 58 were tested by hydrostatic pressure, and seven found to be in such condition as to require immediate repair, which, under the order of the department, was promptly attended to by the owners. The squad also inspected 197 slaughter houses, the condition of nearly all of which is reported to be unsuited, in location and construction, for the purposes to which they are applied. There were also inspected 1,861 tenement houses, which are located in but four Wards, viz. First Ward, 253; Fourth Ward, 456; Sixth Ward, 562; and Seventh Ward, 590, tenement-houses. The inspection of those in the First and Fourth Wards was made only for ascertaining the means of escape in case of fire, ventilation, general sanitary condition, and population, which in these two Wards show that of 709 of this class of houses the means of escape is bad in 269 of them, which are populated by 11,881 souls; that 232 are badly ventilated, and 210 are in bad sanitary condition. The population in the whole 709 houses amounts to 22,859, to which should be added the cellar population, in all sorts of buildings, 2,120 souls, in order that it may be seen at a glance how living human beings are packed away. The measurement of the cellars thus occupied shows an average of about 270 cubic feet of air-space for each person. The examination of the Sixth and Seventh Wards was more thorough, and presents the following results: There are in these two Wards 1,152 tenement-houses, with a population of 37,064. Of this number the means of escape are bad in 728 houses, having a population of 24,648; the ventilation is bad in 324 houses, having 12,192 population; the sanitary condition is bad in 588 houses, having the population of 20,518 souls; the cellar population in these two Wards amounts to 2,672. Exact measurements were made of the apartments of these houses, by which it appears that 2,485 persons live and breathe in apartments where the number of cubic feet of air-space is less than 200 for each individual; that, for 7,229 persons, it is between 200 and 300 cubic feet each; that, for 8,817 persons, it is between 300 and 400 feet each; that, for 6,948 persons, it is between 400 and 500 feet each; that, for 7,421 persons, it is between 500 and 700 feet each; and that, for 4,164 persons, it is between 700 and 1,000 cubic feet each. The average quantity of space each person is permitted to have, in which to live, is not much more than that required between decks on an emigrant ship, both by the laws of Great Britain and of the United States. The Brooklyn report shows that 2,030 cases have been acted on, embracing filthy houses, sinks, yards, cellars, cisterns, culverts, &c.; of which 2,021 of the nuisances were abated by owners, under the order of the department, and only nine were obliged to be abated by the department. This speaks well for owners in Brooklyn, and shows that, in general, they only require to have the proper complaint made, when they promptly apply the remedy."

The prevalence of small-pox in a community may be taken as a fair criterion of the degree of public intelligence in matters of health. When we consider the loathsome nature of the disease, and its virulence, and the simplicity and general application of the means by which it can be totally exterminated, we are astonished that such a disease is known at all in the civilized world. Paradoxical as it may seem, preventive medicine is not as popular as curative medicine. At this season of the year we are so accustomed

to witness the appearance and spread of small-pox, even in our most intelligent communities, that we have ceased to regard the phenomenon as other than a regular occurrence in the course of the seasons. We have reports of its appearance with great virulence in Philadelphia, whose health authorities have hitherto proved that city to have the least mortality of any town in the country. If such things are allowed to occur in Philadelphia, with its intelligent and efficient Health Board, what may we not expect of cities like New York, which have no true Sanitary Police, and disregard preventive medicine? The following items from the *Phila. Inquirer* will show the extent of the ravages of this disease. We may add that some of these statements reflect severely upon the vigilance of the health officials of that city. It is no uncommon thing for corpses to lie unburied in this city until they infect the neighborhood, but we had been led to expect better things of Philadelphia:—

"We are informed that that most terrible disease, the small-pox, has recently made its appearance with more virulence and fatality than usual in some of the small streets in the Western section of our city. In Murray Street, a small avenue running between Sansom and Locust Streets, and Twentieth and Twenty-first Streets, in the Eighth Ward, four families have been attacked by the disease, and four or five persons have died. In William Street, running parallel with Murray Street, between Twentieth and Twenty-first Streets, several poor families are down, and it is feared that the most of those afflicted will die. About two weeks ago a visitor of the poor found a child lying dead in one of these houses in a most shocking state of decomposition. The stench arising from the body was of such a character that it was a long time before an officer of the Board of Health could be found or induced to remove it. Two or three children died a day or two ago, and were removed by direction of the Guardians of the Poor. Five or six were taken from this locality and conveyed to the Small-Pox Hospital. In Hirst Street, running from Fifth to Sixth Streets, between Lombard and South Streets, in the Fifth Ward, the disease made its appearance about three weeks ago in a colored family. In Locust Street, between Twenty-first and Twenty-second streets, an entire Irish family are in bed, and will all probably die. The family consists of a father, mother, and four small children. To-day an entire family, named Githen, residing in Murray Street, will be removed to the hospital. They occupy a small brick house containing six rooms, and with a large family of filthy and indigent persons in each room."

From the *British American Journal* (Montreal), we learn that small-pox is very prevalent at Ottawa, and is propagated by inoculation. There is a law in Canada making inoculation a penal offence.

It is with sincere gratification that we announce the failure of Dr. Morton to secure an extension of his patent for the exclusive use of ether in surgical operations. Whatever may have been the original merits of Dr. M. in bringing forward this valuable agent, it is utterly derogatory to the character of a medical man to seek, by the renewal of the patent, to embarrass its general employment. Besides, we believe Dr. Morton has been amply paid by the profession and public for his labors and sacrifices; and that too under the belief that he never seriously intended to patent the article. The patent expired on the 12th of Nov., 1860, and the petition for a renewal has been rejected by the Hon. P. F. THOMAS, Commissioner.

Reviews.

STATISTICAL REPORT ON THE SICKNESS AND MORTALITY IN THE ARMY OF THE UNITED STATES. Compiled from the Records of the Surgeon General's office, embracing a period of five years from January 1855, to January 1860. Prepared under the direction of BREVET BRIGADIER GENERAL THOMAS LAWSON, SURGEON GENERAL UNITED STATES ARMY. By RICHARD H. COOLIDGE, M.D.,* Assistant Surgeon United States Army.

In the number of the *New York Journal of Medicine*, for March, 1859, we published a critical examination of a contribution to medical knowledge, similar to the work now under consideration, which embraced the results of all the recorded observations made by the medical officers of the United States army from January 1839, to January 1855. We are glad to see that the plan so successfully instituted under the present Surgeon General has not been abandoned, and that we are now able to announce a continuation of the work, in no way falling behind the previous excellent volume, and in many respects surpassing it.

In the book now before us the statistical data gathered during the five years which had elapsed at the commencement of the present current year, are fully equal in value, and useful in their arrangement, to those of any production of a similar character; and, taken in connexion with the former reports from the same bureau, afford the medical profession the only connected, reliable, and systematic *exposé* of the Medical Topography of our *entire* country that at present exists.

To give a clear view of the scope of the present volume, together with a sketch of the plan of its arrangement, we can do no better than copy the following passages from the letter written by the author (Dr. Coolidge) to accompany the report at the time it was transmitted to the Surgeon General.

"The general plan heretofore adopted, viz: that of considering the statistical and topographical details of the military posts in geographical divisions and regions having similar climatological features, has been followed in this report.

"This course has enabled me to include, in the abstracts and tables of the present report, the aggregate results for each region, as given in the report of 1856, thereby enhancing the value of the statistics by extending them over a period of twenty-one years, and not perceptibly increasing the size of the work.

"The abstracts for the several regions have been compiled from the original quarterly reports of sick and wounded required of medical officers on the 31st of March, 30th of June, 30th of September, and 31st of December, annually, and are for years commencing on the first day of January and ending on the 31st day of December. The final consolidated abstract, exhibiting the total amount of sickness and mortality in the whole army, is compiled from your annual reports, which are required by law to be rendered for the government fiscal year, commencing on the 1st of July, and ending the 30th of June.

"In connexion with this report the results of the meteorological observations taken by the officers of the medical department of the army from January 1855, to January 1860, arranged in monthly tables, and annual summaries, are respectfully submitted. This completes the series of

* Promoted to be Surgeon.

army meteorological observations from 1819 to 1860, a period of forty-one years.

"I have also to submit the accompanying outline map of the United States, designed to show the most prominent geographical features of the country, the limits of the military departments, and the positions of the military stations."

The special reports of individual officers on the medical topography of sub-regions and divisions are useful and instructive. Those from the older states, however, though valuable in themselves, are, from the fact that the regions are better known to the Profession generally, not usually as interesting as those coming from little known localities in the far west, and on the remote frontier. An exception to this general statement occurs in the report of Assistant Surgeon Lafayette Guild, upon the yellow fever as it presented itself at Fort Columbus (Governor's Island), New York harbor, in 1856. This report does its author great credit, and should be read by every practising physician in New York city and vicinity.

The next report which attracts our attention is that of Assistant Surgeon E. W. Johns. This communication dwells chiefly on the prominent features of scorbutus as manifested at Fort Laramie, Nebraska. The causes, method of prevention, and treatment of this disease, are very ably discussed.

In the part of the book relating to the Southern states, excluding Florida and Texas, we find but one local *sanitary report*, viz. that of Surgeon Bernard M. Byrne (lately deceased) on yellow fever, as it occurred at Fort Moultrie, Charleston harbor. In this the following striking paragraph occurs. "*How this disease was introduced among the troops at this post is a question that can be satisfactorily answered if we admit its contagiousness; but on any other hypothesis its introduction would be entirely inexplicable.*" Dr. Byrne gives very cogent reasons for taking the view that he does, and it would be well for those paying especial attention to the subject, and who are *willing to hear both sides*, to read his report.

From the Florida district we have short interesting reports by Assistant Surgeons McParlin, Head, Lynde, and others; and to this division of the book there is attached a letter from the Surgeon General to the Hon. D. L. Yulee, by which it appears that the prevalent notions regarding the unhealthiness of Florida are greatly exaggerated. General Lawson says, "I have no hesitation in expressing the belief that had the troops who were employed in the Florida war been engaged for the same length of time in active operation in winter and summer on the frontiers of Canada, though the *cases of indisposition* might have been less numerous, the *mortality* would have been infinitely greater than was experienced in Florida."

Among the reports from Texas we find one from Assistant Surgeon Andrew K. Smith, dated Fort McKavett, July, 1857, in which indisputable instances of poisoning by the *bite of the tarantula* are given.

Assistant Surgeon Basil Norris, writing from Fort Clark, says: "Pulmonary diseases are rare; the dry equable climate has been beneficial to a few cases left in hospital, and at the post none have originated."

Assistant Surgeon Lynde speaks of the prevalence at Camp Hudson of cases suffering from tape-worm. He treated eight of these with oil of turpentine. All were greatly relieved, but at the time the report was written the doctor was not satisfied that in any case the cure was com-

plete. It would be interesting should Dr. Lynde communicate the subsequent history of these cases, as well as what in his opinion was the direct source from whence the parasites were introduced. Dr. Leidy of Philadelphia, we are informed, has after much investigation come to the conclusion that the cause of the presence of tape-worms in man may be ascribed to the eating of *uncooked* pork which has been "measly" in life, and that even those who do not *eat* raw pork may have the minute germs necessary to the development of tape-worms, introduced into the system by eating bread cut by a knife which had been used just previously in cutting pork, and had not been wiped. Tape-worms are said to be very abundant in all the lower animals found in Western Nebraska and Utah; among these may be mentioned hares, and sage fowl, and *even fish*!

We find under the division relating to New Mexico and Arizona a most creditable report by Assistant Surgeon Irwin on the medical topography of the region about Fort Buchanan, Arizona. As but little is known of this portion of our country, Dr. Irwin's report fills an important gap in our geographical knowledge. As to the style of the report, its general comprehensiveness, and the variety of subjects treated upon, it equals if it does not surpass any individual report in the volume, with perhaps the exception of the communications from Utah by Assistant Surgeon Roberts Bartholow.

The medical officers stationed in California and Oregon have contributed many interesting sanitary reports from their respective stations. Although the greater number are brief, they are concise, and, containing *multum in parvo*, are valuable accordingly.

The report of Assistant Surgeon Chas. C. Keeney gives very useful information concerning the Indian tribes living near Fort Jones, Cal. His remarks concerning the evil effects produced by confining Indians to reservations, are well worth the attention of the proper authorities. Dr. Keeney lays stress upon the injurious results following the adoption of the kind of clothing worn by the whites. This report contains much besides of general interest.

Assistant Surgeons Milhau, Glisan, Heger, Randolph, John F. Hammond, and Geo. Hammond, have furnished reports from the posts near the Columbia; and a short report on the local peculiarities, etc., of the settlement at the Cascades of the Columbia is given by Surgeon Barnes.

In the portion of the work relating to Utah we find foremost a very able report by Dr. Bartholow on the diseases of the Tenth Regiment of Infantry while *en route* for Utah, as well as a sketch of the geographical peculiarities of the regions traversed. Dr. Bartholow follows with a special communication from Fort Bridger on similar subjects; and again with a sanitary report from Utah Territory as a *connected whole*. The disease known to frontiers' men as "mountain fever," is described, and its peculiarities discussed. Assistant Surgeon Milhau, on page 304, presents a report mostly devoted to the description of the same disease. Dr. Brewer in an excellent report of the diseases, etc., of the Fifth Infantry while *en route* for Utah, in like manner makes special mention of the "mountain fever." The gentlemen above mentioned seem to differ widely on the treatment of the disease, and the use of quinine is both extolled and condemned.

The statistical tables in this book, showing the diseases and climatic peculiarities of different localities, are of

immense value for reference, and like those of the preceding volume are remarkably free from typographical errors; and are also printed on good paper in clear, pleasant, readable type.

By examining the consolidated tables showing the relative proportion of sickness and death in the different regions and territories, a "bird's-eye" view of the sanitary condition of the country is afforded. It is in these happy endeavors at generalization that the great value of Dr. Coolidge's labor shows itself. In looking over the table on the frequency and mortality of phthisis pulmonalis in different portions of the country, we were surprised to find Utah so far in advance of New Mexico, which again is much more free from the disease than any other State or Territory. We find that the army of Utah had a mean strength of 5842 men; of this eight were afflicted with phthisis pulmonalis, and *only one died!*

In conclusion we must again compliment Surgeon Coolidge for the creditable book he has furnished us, in the preparation of which he must certainly have given a great deal of time and patient labor.

[NOTE.—3500 copies of this work were ordered by the Senate. Medical men desirous of obtaining it can perhaps do so by making application to the senators of their respective states.]

Progress of Medical Science.

MATERIA MEDICA AND PHARMACY.

By EDWARD R. SQUIBB, M.D., OF BROOKLYN.

Chlorodyne.—This most extraordinary humbug does not deserve a moment's serious consideration; and were it not for the circumstance that physicians occasionally resort to it by name, or by its being misrepresented, and without a due knowledge of its heterogeneous composition and quackish character, it could be little else than waste of time and space to allude to it. It claims English origin, or rather to have been *invented* in the English East India service; and in order to secure for it the magical power of mystery and large names, its composition was concealed, or indefinitely stated as a combination of perchloric acid and a new alkalioid. Then it was stated to have been *analysed* by a Dr. Ogden; and the latter is represented as having given the formula by which it is prepared. As it never could have been either *invented* or *analysed*, it is not improbable that its whole story and career are fictitious. It mainly consists of chloroform and muriate of morphia, but contains besides, perchloric acid, oil of peppermint, hydrocyanic acid, tincture of capsicum, molasses, and tincture of cannabis. Such a villanous mixture could never by any possibility have been *invented*, though it may have resulted from some uncommon degree of empirical ignorance and stupidity; and such a mixture, once made, would have defied the skill and knowledge of any analyst whatever, chemical or logical. And yet an analysis is said to have been made, and the proportions are given in drachms, drops, and grains. Then of its properties. It is said to be twice as heavy as water, which, from its composition, is impossible. It is said to be sedative, diaphoretic, astringent, antispasmodic, diuretic, etc., and to improve the pulse in all imaginable respects, including that of *increasing* it by *decreasing* the frequency of the beats; and finally, the sum of its impossibilities accomplished, has the accustomed climax of such cases, namely, that it cures consumption in about the usual proportion of cases, namely, eight out of twelve, and all of

the usual undoubted diagnosis and gravity. That any mixture not absolutely antagonistic in its elements, containing two-thirds of its weight of chloroform, and eight grains of muriate of morphia, in nine drachms, beside hydrocyanic acid and Indian hemp, should be sedative in effect, is not surprising; and the molasses, capsicum, and peppermint are so many additional shot to be fired into the bushes; but the perchloric acid is a novelty. Hitherto regarded chiefly as a chemical curiosity, it now makes its appearance in the materia medica under circumstances most unfavorable for obtaining any definite character or classification. In the small quantity in which it enters the company of these powerful narcotics, its chance of effecting anything more than the peppermint and molasses is remarkably small. The whole thing is, in effect, an absurd sarcasm upon the appetite for novelty and complexity, which appetite, in a portion of the medical profession, is industriously catered to by the crowd of nostrum—or rather money—makers, who are so easily found in the ranks of all sciences and professions.

Tincture of Aloes in Blennorrhœa.—A distinguished clinical practitioner of Bologna, Dr. Gamberini, recommends this new topical application in blennorrhœa, based upon a short successful experience with it. He uses a mixture of one part of tincture of aloes to seven and a half parts of water, and injects three times a day. These injections produce but little scalding at the moment of application, and in the worst case to which they were applied effected a cure in about fifteen days.—*Gazette des Hôpitaux*.

Santonine in the treatment of Amaurosis. M. MARTINI.—The colored vision and colored urine which have been observed from the use of santonine as a vermifuge have suggested its use in some other affections, particularly those of the optic nerve. Three experiments were made upon amaurotic patients by M. Martini. The first in a woman seventy years of age, who could hardly distinguish light from darkness. He gave four to six grains of santonine each day during eight days, and then eight grains each day during three or four days, and at the end of this time the patient could distinguish objects and recognise the faces of assistants. The remedy being then suspended, the improved condition became stationary. In the two other cases similar improvement was effected.—(*Bouchardal's Repertoire*.)

Pharmacy in Belgium.—The new Pharmacopœia.—By a royal act and mandate, under date of 28th December, the following Articles became the law of Belgium.

ARTICLE 1. The Pharmacopœia revised by order of the government, and published under the title of "Pharmacopœia Belgica nova," is approved. The Latin text alone is official.

ART. 2. No copy of the new Pharmacopœia can be issued without the stamp of the Minister of the Interior, and the endorsement of the Inspector-General of the civil medical service.

ART. 3. All those who are authorized to dispense medicines are required to have:

- 1st. A copy of the official Pharmacopœia.
- 2d. Hydrometers to measure the density of liquids.
- 3d. A centesimal alcoholometer.

4th. Good balances, and a correct set of decimal weights, comprising the subdivisions of a gramme to a centigramme, inclusive.

ART. 4. Physicians in their prescriptions must make use of the decimal weights, and also of the nomenclature of the official Pharmacopœia in designating the medicinal substances described in that work. If they desire a remedy to be otherwise prepared, they must give the formula for it in their prescription, or at least indicate the Pharmacopœia in which it may be found.

ART. 5. The doses of medicines must be indicated exclusively in grammes and centigrammes, and, to prevent mistakes, the decimal point must not be used to separate units from fractions.

ART. 6. Pharmacutists must use the decimal weights

both for prescriptions and their general sales. Should they receive prescriptions written in the old medical weights, they are authorized to reduce them into decimal weights by the following rule. They will allow 360 grammes to the medical pound; 30 grammes to the ounce; 3 grammes and 75 centigrammes to the gros, or drachme; 1 gramme and 25 centigrammes to the scruple; and 5 centigrammes to the grain.

ART. 7. The bottles, drawers, etc., which contain medicinal substances, must bear, in plain characters, the names of the substances contained in them, these names to be in conformity with those used in the official Pharmacopœia.

ART. 8. The offices, stores, dépôts, and laboratories of pharmacutists, and in general, of all those who dispense or deal in medicinal substances, shall be visited by the delegated officers of the Provincial Medical commissions at least once a year, at indeterminate periods, and without any previous notice. These delegated officers shall examine all the appliances of such offices, stores, laboratories, etc., and especially the medicines of primary importance. Any medicines which may be found bad or adulterated, or any not prepared in accordance with the Pharmacopœia, shall be caused to be removed, or shall be sealed up by the proprietor.

ART. 9. The Medical Commissions shall place the minutes of their proceedings, or other authorized statements of the non-compliance with these regulations, in the hands of the public minister charged with directing public prosecutions before the tribunals.—*Antwerp Journal of Pharmacy.*

Some such regulations as these, well administered, would very soon improve the *materia medica*, and revolutionize the pharmacy of this country, and would yield an element of certainty and uniformity in our practice of medicine hitherto altogether unknown.

Reports of Societies.

ACADEMY OF MEDICINE.

STATED MEETING, OCT. 3, 1860.

JOHN WATSON, M.D., President, in the Chair.

DISCUSSION ON THE USE OF PESSARIES.

(Continued from page 392.)

DR. PEASLEE. I must express my surprise that Dr. Gardner would use an instrument which he considers so dangerous, in the treatment of so simple a case as stricture of the cervix uteri. In regard to the question of the pathology, it is very true that fatty degeneration of the uterus sometimes occurs as one of the forms of atrophy from displacements of long standing, but this is an exception, not the rule. It would not answer to say that all cases of displacement are attended by that condition of the uterus. Dr. Gardner objects to the theory. I should say that the theory is beautiful; it is a good deal more perfect than the practice. The practice, as I have said before, is difficult. In regard to treating the cause instead of the effect, I should say remove the cause, if it still continues to act, but treat the displacement at any rate.

DR. SIMS. I am surprised at the tenor of Dr. Gardner's remarks in regard to the use of pessaries; at the same time I endorse him in a measure with reference to the utility of abdominal supporters. I have frequently seen the latter appliances attended with a great deal of relief to suffering, though I have never met with an instance where a radical cure was the result. They however had no influence over the malposition, whether anteverted or retroverted, but they simply held up the superincumbent viscera by pressure above the pubes. I have had to give up the use of the intra-uterine stem because, in my hands, it produced mischievous results, by becoming displaced. It is not to be denied that there are cases of malposition in which mechani-

cal means will not be applicable, while a great number are, on the other hand, more or less amenable to treatment. To illustrate what I mean I will relate a few facts:—A lady from the country was brought to the Woman's Hospital in the fall of 1855 on a litter. She had been completely bedridden for more than twelve months. She was married ten years before that, and in due time gave birth to a child, soon after which she lost her husband, and was married again about a year and a half before her admission into the hospital. Her health, though delicate, was generally pretty good. One day she went into the yard to take some clothes from the line, as a storm was coming up. On reaching up, she suddenly felt something give way in the pelvic region. She had great pain, and immediately went to bed, suffering also from nausea and vomiting, with excessive prostration. A physician was sent for, but she never rose from her bed until she was brought to the hospital; a period of twelve months and more. On examination, I found the uterus completely retroverted, the fundus lying towards the left sacro-iliac symphysis, and, besides, the organ was greatly elongated. This elongation was due to the growth of a fibrous tumor on its fundus and posterior surface. Of course, the case had to be treated. The fibrous tumor could not be removed, but still it was necessary to place the uterus as much as possible in position. The uterine elevator was used, and the fundus, with tumor attached, was raised above the promontory of the sacrum. In this condition a malleable block tin ring, about 2½ inches in diameter, was bent in the form of a parallelogram, and curved on its long diameter so as to give it a sigmoid flexure. This was done with the view of fitting accurately the dimensions and capacity of the vagina, so as not to make undue pressure either in the *cul de sac* or behind the symphysis pubis. After a short time the patient was able to walk; and in the course of two or three months, she was sent home, not cured it is true, but the uterus was elevated very nearly into a proper position, and there supported by the simple little contrivance already alluded to. With the hope that conception would take place, she was directed to wear this pessary during the times of coition—for I consider it almost an utter impossibility for conception to take place where the uterus is completely retroverted. In six months after she left the hospital, she returned again for observation merely. Conception had taken place, she went to the full term, and was delivered of a fine boy. The instrument was removed at about the end of three or four months, when the uterus was large enough to sustain itself in its proper relations. She remains tolerably well, with the uterus still in its proper position; but no change in the relations of the tumor has taken place. This case certainly justified some effort at relief, even though it did not result in a perfect cure. Again:—A lady had been married and had given birth to one child, had three or four miscarriages, became then a widow, and was anxious to marry again, but was unwilling to do so if she had to go through again the dreadful trials that attended her miscarriages before. Her physician sent her to me. I found that she had retroversion, with some little enlargement of the posterior wall of the uterus, from long error of position. I told her that I thought the miscarriages were due almost entirely to the retroverted condition of the organ, and that by a properly adapted instrument, to be worn during coition, the difficulty would be overcome, and impregnation would take place, with hardly any danger from miscarriage. She was married on the day that menstruation ceased, four years ago, and went on a bridal tour. In a month she returned, with all the evidences of conception. She went on to full term, was delivered of a healthy child, having been ordered to wear the instrument until quickening occurred. This latter precaution was for the purpose of insuring against a miscarriage. Here, I certainly think that benefit was derived from the use of the instrument. This lady has since given birth to two children without any mechanical means to support the uterus during coition. I consider the cure not due to the instrument, but to a modification of the nutritive

function of the organ, brought about by utero-gestation, which could hardly have gone through its stages without the aid, in the first instance, of mechanical appliances. I will give another instance:—A lady in a neighboring city gave birth, eight years ago, to a child, who had died very young. She was childless then for six years. She was exceedingly anxious for offspring, and on that account alone sought medical advice. On examination, I found a large pelvis, relaxed vagina, and a uterus completely retroverted, but without any complication more than a slight hypertrophy of the posterior half of the organ; and to relieve that it was only necessary to apply a mechanical support that would maintain the uterus in its natural position during the act of coition as well as at other times. It required a ring about three inches in diameter, bent in such a way as to hold the neck of the uterus downwards and backwards, while the fundus was elevated. Conception occurred in three or four months; she wore the instrument until quickening, when it was removed. She was delivered, at full term, of a fine, healthy boy. In the course of twelve months she returned, expressing a desire to have another child, at the same time she was satisfied that such a thing could not take place without the application of the instrument she had previously worn. The same pessary was adjusted with precisely the same results as before; in three or four months conception occurred, and in due time another child was delivered.

I might multiply cases of this sort, but with the indulgence of the Academy, I will relate but one more, which was more complicated than those already referred to. A lady was married fifteen years without offspring. Though her general health was perfect, she suffered from the peculiar symptoms of uterine displacements. I was consulted as much for the prospect of relief to the sterility as for the purpose of remedying her particular symptoms. On examination, I found the uterus retroverted, with a fibrous tumor as large as a walnut in the posterior wall. The neck of the organ was indurated, and the mouth and canal were contracted. Here was a double indication, the position of the uterus could be relieved by mechanical means, but conception would be almost impossible without relieving the contracted cervical canal. An instrument was properly adjusted, and the uterus placed in a normal position, after which, the neck of the uterus was incised from side to side, opening it large enough to admit the point of the index finger. It was kept open until it healed, the mouth of the uterus presenting a pretty natural appearance. In the course of three or four months, conception occurred, the patient in the meantime wearing a modification of the pessary previously alluded to. Unfortunately she miscarried at the end of the third month, which was thought to be due to an accidental fall. In the course of four or five months conception occurred the second time, and was again followed by miscarriage. After waiting several months, till November, 1858, this patient came under observation again. On examination now, I found that the mouth and neck of the uterus had undergone remarkable changes—that the mouth of the womb was so much contracted that I feared conception could not take place again, even if the uterus was placed in its normal position. Therefore I resorted to incision as before, and applied the same instrument that she had worn the year before. In March, four months afterwards, conception took place a third time. This lady was from a distant part of the country, and I insisted that she should remain in New York for cure during the whole period of utero-gestation. She did so, and was fortunately delivered by Dr. Griscom of a fine healthy child, about the first of last December. She remains so far without any return of her original malposition. It seems to me that the results of the cases that I have detailed justified the course of treatment pursued. Dr. Gardner states that he has frequently found inflammation result from the use of pessaries. The reason is simply this:—The medical profession have rather extravagant ideas of the dimensions and capacity of the vagina: nineteen out of twenty will

select at the beginning instruments that are too large. In the great majority of cases, they hardly ever require an instrument that is more than two and a half inches in diameter, sometimes two and three-quarters; very rarely three inches, and sometimes even down to two. It requires a great deal of judgment in the application of the instrument to the peculiarities of the case. If it be too small, it will not afford the necessary support; and if too large, it will unavoidably produce mischief. I have often, over and over again, seen the cul de sac ulcerated almost to the peritoneal cavity, and the neck of the bladder almost entirely severed, and other parts of the vagina ulcerated, by pressure of instruments which were too large. I think that a great feature in regard to the use of pessaries is to make them so as not to interfere with coition, and I want here again to claim for the distinguished Dr. Hodge of Philadelphia, the merit of first demonstrating the practicability of this by the use of his particular pessary, and next to the learned Dr. Meigs for the use of his ring pessary. I take to myself no credit for any modification of the Hodge Pessary, or of the Meigs's Ring—I only claim to have cheapened the instrument—one of Hodge's pessaries will cost five, six, or seven dollars—one of Meigs's gutta percha rings will cost a dollar, while the block tin instrument costs but eighteen cents, and can be moulded to the desired shape to fit the peculiarity of the individual case, while it is as innocuous as gold itself. One other point and I have done. The patient should always be instructed in the use of the instrument. She should be made as familiar with its applications and removal as with putting on and taking off her glove—and I respectfully insist that no woman should ever be sent off a distance to wear a pessary for an indefinite period—I have seen great mischief result from this, and I do most heartily protest against it.

Dr. T. G. THOMAS. I have been exceedingly interested, Mr. President, in the discussion which has just taken place, and particularly so in some of Dr. Gardner's remarks. His views with reference to the utility of pessaries, I must say, have surprised me not a little, and with a hope of being instructed by his extensive experience, I will take the liberty of asking him a few questions which I will introduce by the relation of two cases of uterine displacement. The first is this: Some months ago, I was sent for to see a young married lady, who stated that for the last two years she had suffered from severe pains in the back and hypogastrium, which were much increased during menstruation; and, upon walking even short distances, would become so severe that she had been forced to confine herself almost entirely to her chamber. On several occasions she had suffered from menorrhagia to such a degree, that her health had become much impaired. She had consulted several physicians, some of whom had scarified the uterus and applied leeches to it. One of them having advised her to wear a sponge in the vagina, she had done so to her great inconvenience and discomfort for over eighteen months. Upon vaginal examination, I found the uterus enlarged, congested, and prolapsed. No ulceration, however, existed. As depleting measures had accomplished so little good before, I determined not to resort to them; and finding that pushing up the uterus with the finger and keeping it out of the pelvis gave her great comfort, I decided to apply a ring pessary, with the hope that it might prolong this feeling of relief, and at the same time serve to prevent congestion of the uterus by removing it from its unnatural and cramped position in the pelvis. I did this, and in ten days the lady was so well that she took a long walk; her spirits rapidly improved; her general health kept pace with them, and at the end of two months (during which the pessary was employed, with astringent injections), she was discharged cured. I saw her recently, and she declared that the only discomfort which she now had was that arising from the thought that for two long years she had suffered when relief could so easily have been procured. She no longer uses the pessary or injections, and is as well as she could desire to be.

The second case occurred in a lady whom I was attending for dysentery. Contrary to my directions, she left her bed and went to the staircase to call her servant, when she was suddenly seized with agonizing pelvic pains, and fell to the floor, from which she was lifted by her attendant and placed in bed. I saw her next day, but imagining these pains, which had now nearly passed away, to have been intestinal, I paid little attention to them. She soon got well of the dysentery, and took a journey in the cars; at the end of which she suffered most intense pain in the pelvis and back, which had so much the appearance of those caused by uterine displacement as to incite an examination. This discovered the existence of marked retroflexion, which being reduced, her suffering instantly ceased. On the next day, however, it returned from her walking about; and reduction being again accomplished, I introduced a sigmoid pessary, which, running up into Douglas's cul de sac, supported the fundus perfectly. It was no sooner in place than she was able to leave her bed and walk without much pain; and at the present time, about one month after the accident, she is quite well, still wearing, however, the pessary, which as yet I fear to remove.

Now, sir, I do not mean to say that many such perfect cases of relief by pessaries are met with; they certainly have not been in my practice. These are avowedly selected cases, and this is why I have related them. I believe that I treated them correctly, I know that I did so successfully; and what else I could have done which could have answered as well, I do not know. Now, all of the members of the Academy here present have seen and see commonly similar accidents, and among others Dr. Gardner does so; will he inform me how he treats them? Will he oblige me by stating what he could have done in the two cases which I must apologize to the Academy for detaining it so long in relating? I yield the floor for his reply.

Dr. GARDNER stated that the remarks which were previously made by him in regard to the treatment of uterine displacements referred particularly to those cases which were uncomplicated. In both the patients referred to by Dr. Thomas, complications did exist; in one there was metritis, and in the other dysentery.

Dr. SIMS remarked that he never saw any but complicated cases.

The Academy then adjourned.

Correspondence.

DOMESTIC CORRESPONDENCE.

ALBANY.

Dec. 1, 1860.

I AM glad to notice that you are disposed to excite our county medical societies to action, and to awaken them to a sense of their duties. It is far too generally believed that the laws of the State have divested them of all power and influence. It is a question well worthy of being thoroughly studied by the profession, as you suggest, how far the powers of the county societies have been diminished or modified by legislative enactment. In my opinion they have been but slightly, if at all affected, and such, I think, is the opinion of those who have given the subject the most study. But even if they have lost all legal position it is idle to abandon them; on the contrary, they should be converted into active scientific societies. The Albany County Medical Society has always maintained considerable vitality, and I am glad to be able to report that it is beginning to assume an activity which will render it at once useful and influential.

The annual meeting was held on the 13th of Nov., and was one of the largest and most enthusiastic gatherings which I have seen for many years. The President of the society, Dr. W. F. CARTER, gave the annual address, which was replete with interesting and practical matter. In con-

nexion with two cases of hydrophobia which had come under his notice, he alluded to a class of affections of the lungs in which the air does not seem to penetrate to the air cells, owing as he thinks to a paralysis of the nerves supplying the air cells. He regarded the diseases as similar in those respects. Dr. HOFF reported a case of tetanus which occurred in the City Hospital under Prof. MAROH. It was the result of a gun-shot wound of the hand. He was treated with nourishing diet, opiates, tobacco enema, etc., without permanent relief. Finally the new method of subcutaneous injection of morphine was practised, one fourth of a grain of morphine being used; this produced sleep, but did not relieve the symptoms, and he sank rapidly and died. I think the question may well be raised, if, in the subcutaneous injections of morphia, we are not liable to use too much. I am satisfied that I have seen the most alarming symptoms produced by the use of a much smaller amount than is generally given by the stomach.

The following officers were chosen: *President*, S. VANDERPOOL, M.D.; *Vice-President*, L. G. WARREN, M.D.; *Treasurer*, G. H. NEWCOMB, M.D.; *Secretary*, O. H. YOUNG, M.D. The following gentlemen were appointed delegates to the State Medical Society: Drs. W. F. CARTER, JOHN SWINBURN, W. H. BAILEY. The best evidence of the activity of our Society is the appointment of monthly meetings. Dr. POMFORT will read a paper on the *medicinal uses of alcoholic liquors*, at the next meeting.

The Albany Medical College exerts but a small influence in the medical world. Although its faculty contains some able and competent men of the younger class, it is sadly in need of rejuvenation. It has long been a kind of one-man power, and far more subservient to private and personal aims and ends than public good. If medical teachers would learn that when they have attained a somewhat advanced age they are no longer capable of instructing classes, because they are no longer able to keep pace with the improvements in the medical sciences, it would be a great blessing to most of our schools. Albany College would be especially benefited could some of the younger men be placed in the professional chairs now occupied by men who annually teach the same old and obsolete doctrines.

INCOG.

PHILADELPHIA.

Dec. 3, 1860.

I SEE your Boston correspondent is quite disposed to feel irritable at the prominence which Philadelphia has gained, as a seat of medical learning, reclaiming loudly in favor of the little Athens of America. This exhibition of feeling is entirely unnecessary, if not entirely improper. The position which Philadelphia has gained in the medical world, though enviable, has not been sought by any unworthy arts or means. Her schools rank high, because her teachers are capable, and eminent in their several departments; her medical works are the best that are published; and her periodicals are deservedly esteemed among the first in the country. The city that thus excels in every department of medicine, must and ought to bear away the palm of excellence, and has a right to consider itself the "hub of the medical universe." I do not mean to depreciate the medical character of any other city, least of all of Boston, which is entitled to an important place in the medical history of our country. I merely state an invariable and inevitable law, which is based on the nature of things. And it is to this special topic, suggested by your Boston correspondent, that I desire to confine my letter.

How can a medical school attain the highest and most substantial reputation? I answer, by the most thorough course of instruction given by medical schools, and not by the number of its students and graduates. The latter will follow the former as a natural result, but the former should be the sole aim of the Faculty. This has been the highest aim of the Philadelphia schools. I recur with pride to the long list of teachers, who, by striving with honorable emulation, not only gave to their individual schools eminence,

but won for themselves the highest positions in the professions. I may here add, that I have ever thought it a great mistake when a school has sought to fill its vacancies with some distinguished teacher from a distant city. We always have in our midst young men who, if placed in these responsible positions, would soon develop talents of the highest order. In this respect the University presents a strong contrast to the Jefferson school, and in my estimation is far more deserving the patronage of the profession of Philadelphia. Instead of sending abroad for professors, it has filled its chair of Anatomy with LEIDY, its chair of Surgery with HENRY H. SMITH, and recently its chair of Medicine with PEPPER, men who will prove themselves worthy of their predecessors, and the equals, if not the superiors of any Southern or Western importations.

In medical literature Philadelphia must hold the first position, because of the excellence of her works. I do not now refer to the re-publications with which she supplies the country, and for which she deserves great credit, but to the original works emanating from her own authors. She has produced more standard scientific medical works than the entire country besides, and of these many will long remain unsurpassed.

Finally, in periodical medical literature, Philadelphia long has, and, I believe, long will, maintain the supremacy. And when I say this, I allude especially to periodicals of domestic growth. The *American Journal of Medical Sciences* has been the first American periodical for more than a quarter of a century, and will retain that position for the same period to come. In periodical literature we have the same importations as in the schools. The *Medico-Chirurgical Review* is a fair representative of western education and ideas, and has little claim upon the sympathies of the profession of this city, and meets with little encouragement. The *Reporter*, like the last-mentioned periodical, is also an importation, and is a fair representative of New Jersey education and enterprise. It draws upon New York for its most interesting matter, and I understand that its principal editorials are written by a political doctor of your city; certain it is, that they smack too much of the medical politics of New York to be agreeable to the palate of Philadelphians.

In this reclamation in favor of Philadelphia, I have not been influenced by any local feeling other than what would be excusable in a person intimately connected with the profession of this city, for the better part of a life of three score years.

SENEC.

FOREIGN CORRESPONDENCE.

Letter from DAVID P. SMITH, M.D.

EDINBURGH.

October 26.

YESTERDAY I had the pleasure of meeting Mr. Jones, of Jersey, at Dr. Simpson's, at dinner. In the course of conversation, Prof. S. spoke in high terms of the *veratrum viride*, as an arterial sedative, remarking especially upon its compatibility with stimulants. Mr. Jones detailed his method of treating delirium tremens, which was by the use of digitalis. He now gave one half ounce of the tincture, of the strength prescribed by the London pharmacopœia, and repeated it every three hours until it controlled the delirium. In speaking of excision of the joints, on which subject he may justly speak *ex cathedra*, he remarked he had lately excised the ankle successfully in quite a number of cases. He had no fixed incision, but cut wherever the pre-existence of fistulous openings made it most convenient. He urged the importance of not hurrying the operation, but by taking plenty of time to remove both malleoli and articulating surface of the astragalus without injury to the soft parts. He mentioned the case of a girl where he had excised the ankle-joint of one leg, and the hip-joint of the other, leaving her well. He also had had a case followed

by complete recovery and preservation of the movements of the arm, where he had removed the whole of the scapula and one inch and a half of the acromial end of the clavicle. Another extraordinary case had occurred to him, in which after returning the sac of an umbilical hernia in a woman, aged thirty, he had operated for radical cure by transfixing the loose sac of integument and cellular tissue close to its base, it being of large size, with needles carrying threads, and then, after cutting off the loose sac of integument, just sewing up the aperture in the abdominal walls. Prompt recovery followed.

Mr. Jones insisted much on the after treatment of surgical cases, and considered that quite as important as the skilful performance of the operation. He said some of his cases of excision of knee-joint grew afterwards, and others did not *keep pace* with the opposite limb. Prof. S. remarked that there was a tombstone in Wales nearly two hundred years old, which bore upon it an inscription stating that the defunct was a forty-first son—of one father and one mother—and father of twenty-eight children. Prof. S. remarked that he had found *actæa racemosa* very efficacious in lumbago, in doses of 30 drops.

Oct. 31.—I was shown by Dr. Begbie, in the Royal Infirmary, a man in quite good health, from whom, within the last six or eight months, there had been taken from 800 to 1000 ounces of purulent fluid by thoracentesis. He remarked, that when the effused fluid was purulent there was no necessity for preventing the entrance of air into the pleural cavity. Accordingly, a bistoury was used in this case, and as often as the fluid re-accumulated a fresh opening was made. Now the man appears quite well; no effusion, and chest quite resonant. Dr. B. also showed me a patient in whom the spleen occupied the whole of the right half of the abdomen. The prescription given to an apparently healthy man laboring under well marked epilepsy, was, 1st: Abstinence from meat; 2d, Entire disuse of alcohol; 3d, A seton in the neck; and 4th, One-third of a grain of ext. belladonnæ bis die. A case recently occurred in the medical wards of a somewhat unusual character. When admitted, the man was laboring under all the symptoms of advanced tracheitis. On percussion, an abnormal dulness was thought to exist just behind the manubrium of the sternum. A certain diagnosis was not made out. In a few hours, suffocation impending, tracheotomy was performed, but no relief obtained, and the patient succumbed. On post-mortem, a small aneurism of the aorta was found, which pressing on the trachea had produced death by mechanical obstruction. I also witnessed the post-mortem of a man who was admitted to the hospital laboring under ascites from cirrhosis of the liver. He appeared to be doing very well until one day he complained of soreness of the throat and was hoarse. His throat, which I saw myself, was slightly congested; but his speech was vocalized and not in a whisper. The next morning he was found dead in his bed. On examination acute laryngitis was found to exist, with great effusion into the sub-mucous tissues. The fact that he was seen late the preceding evening with but trifling evidences of disease, shows the rapid progress of the effusion.

Nov. 2.—A case being shown of healing lupus with frightful scars upon the head and face, showing loss of integument and bone, Prof. Bennett questioned the man very closely and elicited from him that he had been salivated four times, once eight years before the occurrence of venereal disease, and three times subsequent to the contracting of a chancre and bubo. Disease of the skin and cranial bones appeared after the second salivation. Prof. B. named the disease mercurial poisoning, and prescribed stimulants, tonics, and good diet. In a case of general cedema with soreness of the back, scanty urine with albumen and granular casts, and great tendency to sleep, which cupping in the region of the loins had failed to relieve, Prof. Bennett ordered the abstraction of eight ounces of blood from the arm to relieve the congestion, and the administration of cream tartar. In remarking upon two cases of jaundice he said he never

gave mercury until a sufficient time had been given for nature to act.

Nov. 5.—The medical lectures in the University began to-day. I attended the lectures of Professors Miller, Simpson, Syme, and Goodsir. Prof. M. remarking that he stood to the class *in loco parentis* gave the young men some very good advice upon the proper use of their time, and the avoidance of evil habits. Prof. Simpson enlarged upon the great importance of his branch of the healing art, remarking that proper hygienic care, and a more intelligent consideration of children's diseases had, within the last one hundred years, reduced the mortality of children, in London, under five years of age from 74 deaths in every 100 to 31 in 100. The mortality of lying-in women had also been greatly diminished. In approving of the operation of ovariectomy, he remarked he had within a day or two received a letter from Dr. Clay, in which he said that he had removed the ovary in 99 cases, of which 30 had died. Prof. Syme remarked upon the great importance of not being easily influenced by every new and untried doctrine. He considered the adherence to principles carefully adopted to be the crowning excellence of a surgeon. In commenting upon this, he instanced the case of a young surgeon who, by way of a net, wrote a pamphlet extolling the efficacy of injections of iodine in healing fistulas in ano. The net being spread, fish were caught but could not be cured, and the want of judgment in adopting this false principle interfered much with the young man's advancement. A lad, twelve years old, was shown with one elbow ankylosed with the arm extended. Early in life he had sustained fracture of the lower end of humerus which had been allowed to unite with the arm in this faulty position. Prof. S. proposed to reflect the soft parts by the usual H-incision, and then saw out the joint from behind forwards on account of the obstacle that the ankylosis would present to the turning out of the ends of the bones. I may remark that this would be similar to the operations performed by J. Rhea Barton and Gurdon Buck upon the knee-joint. Prof. S. remarked upon the great importance of removing what would seem to be an undue amount of bone, in order to insure the union of the bones by a ligament which would allow of freedom of motion.

Medical News.

APPOINTMENTS.

MONTREAL GENERAL HOSPITAL.—Dr. CRAIK, Demonstrator of Anatomy in the Faculty of Medicine of McGill College, Attending Physician, in place of Dr. Sutherland, resigned.

Dr. D. H. AGNEW has been appointed Curator of the Pathological Museum of the Philadelphia Hospital.

PERSONAL.

Dr. LAVELL delivered the general introductory of the Faculty of Medicine of Queen's College, Kingston, Canada.

—D. C. McCULLUM, M.D., delivered the introductory of the Faculty of Medicine of McGill College, Canada.

Dr. H. D. NOYES, Surgeon to the New York Eye Infirmary, is organizing a class for the study of Ophthalmoscopy.

—Dr. HIRAM CORLISS, of Union Village, Washington Co., New York, has had his office partially destroyed by a mob, on account of his efforts to enforce the Excise laws.

Dr. WM. W. SANGER has resigned his position as Resident Physician of the Island Hospital, Blackwell's Island.

—Dr. L. J. WILLIAMS, Surgeon, and Dr. C. E. LINING, Assistant Surgeon to the Sloop-of-War Cyane, in the Pacific, left in the California steamer, December 1.

Dr. JOHN H. GRISCOM was elected President of the American Prison and Reformatory Association at its late session in this city. —Dr. J. H. JEROME, Physician to the Marine

Hospital, S. I., has been forcibly deprived of the furniture of his house and office, and charges the Commissioners of Emigration with being concerned in the offence.

BIRTHS.

MINER.—On Nov. 23d, at Noank, Conn., ABBIE J., wife of O. E. MINER, M.D., of a son.

DEATHS.

SAWYER.—At Raymond Centre, Racine County, Wis., Sept. 6, 1860, of scarlet fever HELEN H., daughter of Gov. H. H. SIBLEY, of Minnesota, and wife of Dr. S. J. SAWYER, of Raymond, in the 20th year of her age.

NEW YORK HOSPITAL.—The following gentlemen have been appointed Junior Assistants:—Surgical, Drs. G. R. Cutter and H. M. Sprague; Medical, Dr. F. L. Town. Dr. D. F. Weir has been appointed Resident Physician in place of Dr. J. C. Acheson, resigned.

The State Medical Society's Committee on the Topography and Hydrography of the State, call for further responses to their Circular.

THE SLANDER SUIT OF FISHER vs. STONE, recently on trial at Chicago, terminated November 17. The verdict was in favor of the defendant, H. P. Stone, and against Dr. Fisher.

The authorities of the Pennsylvania and Philadelphia Hospitals are about to establish pathological museums in connexion with their respective institutions. The authorities of the latter hospital are about to erect a new theatre.

MR. EDMUND BELFOUR, for fifty years Secretary of the Royal College of Surgeons, of England, has had a piece of plate, valued at two hundred guineas, presented him for his fidelity.

NECESSITY OF BEARD.—MR. CHADWICK says that he was once very much struck by seeing some blacksmiths, who wore beards, with their mustachios discolored by a quantity of iron-dust which had accumulated amongst the hairs. It occurred to him, on reflection, that but for the beard the dust would have found its way into the lungs. He therefore advises all laborers in dusty trades, as millers, bakers, masons, etc., to discard the razor.

AMERICAN JOURNAL OF INDIGENOUS MATERIA MEDICA.—This is a monthly journal of 32 pages, to be "devoted to the advancement and dissemination of a knowledge of our indigenous materia medica." The first number contains articles of practical interest by well known writers in this department. The field which this periodical enters will yield abundant fruits if thoroughly cultivated. It is published by B. KEITH, at \$1 per year.

JOURNAL OF HUMAN SCIENCE.—This is the title of a periodical, edited by Prof. W. BYRD POWELL, of Covington, Ky. The editor alleges that he has made various discoveries in phrenology and human science of value to physicians.

HOW TO RENDER CLOTHING NON-INFLAMMABLE.—The *Lancet*, in calling attention to the frequent cases of deaths by fire, states that the two solutions found most effectual are tungstate of soda and sulphate of ammonia, the former being preferable for woven fabrics, since it allows the iron to pass smoothly, whereas other salts do not. The following are the directions for their use:—"The solution which does not become clear must be made with warm water, and should be well stirred. A sheet of linen is then soaked in it and dried. The articles of dress, or curtains, after being well starched, blued, and rough-dried, are saturated in the solution, then rolled in the above piece of linen, and ironed as usual."

PHILADELPHIA.—It is interesting to note the increase of population of this city. In 1684 it had 2,500 inhabitants. In 1777 or 1778, by a census ordered by Lord Cornwallis, it had (exclusive of the army and strangers) 21,767; in 1790, 42,520; in 1800, 70,287; 96,387 in 1810; 119,325 in 1820 (up to this date it was the largest city in America);

167,325 in 1830; 258,037 in 1840; and 408,762 in 1850—showing an increase of 58½ per cent. in the decade prior to 1850, and of 953½ per cent. in the years prior to the same date. The population of Philadelphia, according to the present census, is 568,034; the number of dwellings 89,978, being a dwelling to nearly every six inhabitants.

COMPARATIVE PROGRESS OF NEW YORK AND PHILADELPHIA.

	New York.	Philadelphia.
1790.	33,131	42,520
1800.	60,489	70,287
1810.	96,373	96,387
1820.	123,706	119,325
1830.	202,589	167,325
1840.	312,852	258,037
1850.	515,394	408,762
1860.	821,113	568,034

MARINE HOSPITALS.—England has four hospital-ships in her fleet in the Indian Seas, viz.: The *Mauritius*, an iron steamer of 2,134 tons, fitted for 212 beds; the *Melbourne*, an iron steamer, of 1,300 tons, with 120 beds; the *Sir William Peel*, a wooden steamer of 1,500 tons, fitted for 100 beds; and the *Lancashire Witch*, accommodating 96 men. It is said that the "sick and wounded are attended with the same care and solicitude as in the best London hospitals."

TO CORRESPONDENTS.

J. J. C.—All medical works will be reviewed in the *MEDICAL TIMES* as soon after their issue as possible, and by competent writers.

G. K. A.—The report was duly received.

J. K. L.—Will accept our thanks for his favors.

W. B.—Your strictures upon the unprofessional conduct of the physicians of your vicinity, in the case alluded to, are just, and will have as much weight as anything we could say. We beg you not to think that this disregard of all professional courtesies is peculiar to your own neighborhood.

We beg to renew our request to our American exchanges, to be informed of the amount of fee paid to chemical experts for the analysis of the stomach and contents, with other portions of the body, in cases of suspected poisoning.

BRITISH AMERICAN JOURNAL.

Your question is difficult to answer, because it is vaguely put; the amount of labor required is not stated. Was the analysis required to be made in search of one article known or suspected to have been given, or was it made in search of any poisonous substance that may have been administered? For the minute and laborious investigation made by Professor Doremus in the Stevens case, we believe the fee paid was about \$3,000, but in this case it will be recollected that two entire bodies were subjected to scrutinizing investigation. In making these chemical analyses it should be borne in mind that the labor is not ended when the analysis is complete; there is the examination of the chemist before the Coroner's Jury, before the Grand Jury, and before the Criminal Court on the prisoner's trial. There is the cross-questioning on that and many other irrelevant subjects, to try to show to the jury that the chemist is not perfect, that he does not know everything, and therefore his testimony is of but little value in the present case.

There is another and more important feature to be borne in mind. A fellow-creature's life depends upon the skill, judgment, and honesty of the analyst; there can be here no mere suspicion, the poison must be positively shown to exist, not by one, but by all the known reagents; and if the quantity of poison is small, it must be shown that there is enough present to destroy life. We think for the amount of scientific skill, labor, and annoyance in the Stevens case, that Professor Doremus was inadequately paid, and if the case to which our friend refers was of that nature, we think the charge should be equal. For the analysis of a stomach and its contents, with the intestines, when the search is for one article only, known or suspected to have been administered, the minimum charge should be \$500, and larger in proportion to the labor and scientific skill required. When our fees more nearly approach those of our professional cousins, the lawyers, our skill and judgment will be more highly appreciated.

NEW YORK, Dec. 4.

SAM'L R. PERCY, M.D.

What is the "ingenious method of treating prolapsus of the funis," introduced by Dr. Thomas, of the Bellevue Hospital, New York?

MISSA, Nov. 28, 1860.

W. T. WARD.

[It consists in, *First*, Placing the patient on her elbows and knees; *Second*, in returning the cord, which is easily done owing to the falling of the viscera and fetus forward (it will often recede spontaneously); and, *Third*, In maintaining the patient in this position until one or more pains force the head so firmly into the strait, that the cord cannot again escape.—ED. MED. TIMES.]

H. O. H.—Your note of November 30 is received. You will receive a package from this office, which you will please use at your discretion.

What shall be our Title?—Under the caption, "What shall be our Title?" you some time since very forcibly pointed out the necessity of a new title by which to designate the legitimate practitioner of medicine. You very properly pointed to the *American Medical Association* as the power which was to confer the degree. I have long felt that some

action by the profession was required, and anxious to elicit an expression of opinion upon the subject, allow me to suggest a plan which I have entertained for years. I propose that the *American Medical Association* elect a Board of Examiners, say one from each State, who shall constitute a "College," and have the power of conferring degrees, or a degree, with the title "Fellow of the American Medical Association," or something to imply the same. Of course these Professors are not to give lectures, or instruction in any manner. They should have power, however, to establish their own standard for the degree which they confer—and by virtue of such power they may exclude, not only students, but colleges and universities. I mean to say that they may decide whether graduates of certain colleges shall be permitted to come before them for examination or not. This college would, therefore, directly or indirectly, control all medical colleges.

MICH., Nov. 27.

A. C.

COMMUNICATIONS have been received from:—

Dr. WM. MASON TURNER, Va.; Dr. WM. BRODIE, Mich.; Dr. GEO. SUCKLEY, N. Y.; Dr. J. K. LEAMING, N. Y.; Dr. O. E. MINER, Ct.; Prof. JOHN ORDBONKAUX, N. Y.; Prof. CHAS. A. BUDD, N. Y.; Dr. J. J. COLLIER, Md.; Prof. AUGUST FLINT, New Orleans; Dr. DAVID P. SMITH, Edinburgh, Scot.; Dr. T. C. MOFFATT, N. Y.; Dr. J. W. HUNT, N. J.; Dr. GEO. K. AMERMAN, Ill.; Dr. EDWARD HALL, N. Y.; Dr. A. E. VAN DUSEN, N. Y.; Dr. A. D. HARVEY, N. Y.; Dr. R. A. VANICK, N. Y.; Dr. H. D. HOLTON, Vt.; Messrs. MERRELL & Co., O.; Dr. W. H. PITCHER, N. Y.; Dr. G. P. HACKENBERG, N. Y.; Dr. A. H. KNAPP, N. Y.; Dr. J. K. LEAMING, N. Y.; Dr. T. F. HALL, N. Y.; Dr. H. JEWETT, O.; Dr. T. G. PRIOLEAU, S. C.; Dr. J. S. BRIGHAM, Vt.; Dr. D. C. HOLLEY, Mich.; Dr. J. E. VAN RENSSELAER, N. Y.; Dr. T. B. PARMELEE, N. Y.; Dr. E. S. ALLEN, N. Y.; Dr. S. V. R. GOODRICH, N. Y.; Dr. C. W. COOPER, N. Y.; Dr. G. P. UPHAM, N. Y.; Dr. WETMORE, N. Y.; Dr. R. HUBBARD, Conn.; Dr. L. DAVENPORT, Mich.; Dr. A. WORTHINGTON, Ala.; Dr. W. T. WARD, Miss.; Dr. H. O. HITCHCOCK, Mich.; Dr. W. T. STILLWELL, Mich.; Dr. C. V. MOTTRAM, Mich.

METEOROLOGY AND NEOLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 24th day of November to the 30th day of November, 1860.

Deaths.—Men, 108; women, 93; boys, 103; girls, 112—total, 406. Adults, 195; children, 214; males, 205; females, 204; colored, 4. Infants under two years of age, 143. Among the causes of death we notice:—Infantile convulsions, 25; croup, 16; diphtheria, 18; scarlet fever, 21; typhus and typhoid fevers, 10; consumption, 65; small-pox, 4; droopy of head, 13; infantile marasmus, 20; inflammation of brain, 18; of lungs, 30; bronchitis, 7; congestion of brain, 18; of lungs, 4; erysipelas, —; whooping cough, 4; measles, 2.

Nov.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10	In.
24th.	29.69	.54	30	16	45	3	5	W.	8	
25th.	30.07	.81	31	15	37	8.5	5	W.	0	
26th.	30.24	.09	31	20	40	4	5	SW.	7	
27th.	29.97	.11	46	41	51	1.5	2	S.	10	.6
28th.	29.93	.06	35	31	40	5	7	SW.	6	
29th.	29.81	.31	43	40	46	5.5	8	SW.	4	
30th.	29.47	.41	43	40	46	2.5	4	SW.	8.5	

REMARKS.—25th, wind fresh all day; 26th, wind light, cloudy P.M.; 27th, rainy all day, calm; 28th, wind light all day, clear P.M.; 29th, fog A.M.; clear P.M., wind light; 30th, light rain P.M., wind light.

MEDICAL DIARY OF THE WEEK.

Monday, Dec. 10.	{ NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Tuesday, Dec. 11.	{ NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. EYE INFIRMARY, Diseases of Ear, 12 M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
Wednesday, Dec. 12.	{ EYE INFIRMARY, Operations, 12 M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Sayre, half-past 1 P.M. N. Y. PATHOLOGICAL SOCIETY, half-past 7 P.M.
Thursday, Dec. 13.	{ OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
Friday, Dec. 14.	{ NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Church 1½ P.M. EYE INFIRMARY, Diseases of Eye, 12 M.
Saturday, Dec. 15.	{ BELLEVUE HOSP., Dr. Wood, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M. NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M. EMIGRANTS' HOSP., WARD'S ISLAND, Dr. Carnochan, 8 P.M. EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

BELLEVUE HOSPITAL.—On Saturday (this day), Dec. 8, Dr. JAMES R. WOOD will commence his winter course of lectures on Operative Surgery, illustrated upon the subject.

Original Lectures.

LECTURES ON
STRICTURE OF THE URETHRA,
PRELIMINARY TO THE
CLINICAL COURSE ON DISEASE OF THE GENITO-
URINARY ORGANS.

DELIVERED AT THE UNIVERSITY MEDICAL COLLEGE.

BY

W. H. VAN BUREN, M.D.,

PROFESSOR OF ANATOMY, ETC.

LECTURE V.

WE have in the next place to consider the *curative treatment of Stricture of the Urethra*, and to command success here, it is to be clearly understood that purely medical measures are as necessary as surgical manipulations. After attaining a satisfactory diagnosis as to the existence of permanent stricture, their situation, nature, and number, and the condition of the genito-urinary apparatus, the patient's age, previous medical history, habits, and temperament, are to be carefully considered. He should be fully impressed with the serious character of his malady, and informed of the certainty with which it will sooner or later lead to most grave and painful results if not judiciously managed; prudence, docility, and steadiness of purpose in the employment of remedies are especially to be enforced. The neglect of these precautions often leads to disappointment, both to patient and surgeon; and the subjects of this disease, especially if young, are notoriously imprudent and reckless of consequences, until they have acquired for themselves experience often too dearly bought. Remedies addressed to the general health, if required, the correction of improper habits, regular and proper diet, avoidance of alcoholic stimulants, and of exposure to cold and wet, the use of warm clothing, and the administration of diluent and alkaline drinks, constitute some of the medical measures most generally indicated before commencing the surgical treatment of stricture. The surgical remedies employed for the cure of the disease, may all be included under one of the three following heads, viz. 1. Dilatation; 2. Caustics; 3. Incision.

The treatment of stricture by the process of *dilatation*, is applicable to by far the largest proportion of cases encountered in practice, and especially to those which are taken in hand early, before the disease has reached its advanced stages. The instruments to be employed are silver catheters, steel sounds, and catheters and bougies of flexible material, such as have been already described when we were studying the diagnosis of stricture. The mode in which these instruments effect the cure of stricture is two-fold; in the first place, by simple mechanical dilatation of the contracted portion of the urethra; and, in the second place, by causing absorption, by their contact, of the exudation in and around the walls of the canal, by which its calibre is diminished. The mode of conducting the cure of stricture by the process of simple dilatation, in a case in which an instrument can be carried through the stricture into the bladder, is as follows: If the stricture will not admit a steel sound of the size No. 4 of the scale in ordinary use, or a larger one, then a *flexible* bougie is to be selected of the largest size that can be introduced: if an ordinary blunt-pointed bougie will not pass readily, choose one with a tapering point. For tight strictures the latter is always preferable, inasmuch as it acts like a wedge, and will effect dilatation when engaged in a stricture, even when it will not pass through it, possessing thus an advantage over the blunt-pointed bougie, which, under similar circumstances, acts only upon its face, or, in any case, upon

less of its surface. After being fairly introduced, the instrument should be allowed to remain in contact with the stricture not longer than five minutes. If you should ask me why I specify so short a period, my answer would be that a longer contact of the bougie with the surface of the stricture might cause irritation, or increase existing inflammation, or even give rise to spasm and retention of urine. Inflammation is always present, in a greater or less degree, in every organic stricture, as you already are aware; and the object of this mode of treatment is to modify and remove this inflammation and its consequences, and experience has taught us that longer contact of a foreign body with the surface of a stricture is attended by risk of increasing inflammation, except in a case where familiarity with the temper of the stricture has demonstrated its greater tolerance. I am confident that your progress will be more rapid in the great majority of cases by adopting this rule. On withdrawing the instrument, caution your patient against exposure to cold, and against getting his feet wet.

How soon should the operation be repeated? As a rule I should answer, *in not less than three or four days*. To explain the reason for this opinion, I must call your attention to the phenomena which usually follow the first introduction of a bougie through a stricture. If the patient passes water soon after the withdrawal of the instrument, he is generally gratified by recognising a marked increase in the size of the stream; if, on the contrary, several hours elapse before he attempts to relieve himself, the increase is not so marked. On the next day it will probably be as small as ever, and it is not until the third or fourth day that the full dilating effect of the application of the instrument is apparent; and the stream may go on improving in size to the end of the week, or even longer. Now these phenomena are thus explained: the first effect which follows the passage of the instrument is the result of simple mechanical dilatation of the stricture, and hence the prompt increase in the size of the stream of urine; but some increased turgescence of the altered blood-vessels of its diseased surface always follows the contact and stretching of the stricture by the sound or bougie, no matter how carefully it may have been applied or how soon removed, and this *may* amount to inflammatory swelling—hence the subsequent narrowing of the stream; after a time, longer or shorter according to the amount of local excitement produced by the instrument, this inflammatory turgescence passes away, and actual absorption of exudative deposit follows—which absorption may go on for an indefinite time, say, for example, in a recent stricture, for a week—and it is not until the expiration of this period that the full effect of the operation upon the stream of urine is experienced: after this, recontraction usually ensues. It is obvious, then, that the dilating instrument should not be again employed, until the full effects of its first introduction have been secured—otherwise, by reëxciting inflammatory action, we lose the secondary effect in producing absorption, which only takes place after this has in a degree subsided. Thus you have an illustration of the two-fold action of the mode of cure we are studying: first by mechanical dilatation; second, by the vital process of absorption—and it is upon the latter that we mainly rely for the cure of organic stricture.

It is apparent also why we usually request the patient to evacuate his bladder before passing an instrument—for a longer period of rest is thus secured before the urine is brought into contact with the recently excited surface of the stricture, and one source of inflammation avoided; and it is also explained why the use of diluents and alkalies by the patient, by rendering his urine more dilute and less irritating, facilitates the cure of the disease.

It is a good rule therefore to repeat the introduction of the bougie or sound, as soon as all irritation caused by the previous introduction shall have disappeared, and not until after the stream of urine has ceased to improve in size. If the amendment is obvious, make use of an instrument one size larger than the one first employed; otherwise introduce the first instrument and withdrawing it at once, follow with

the next size—leaving it in the stricture the usual time. This process is to be repeated, with the precaution, and at the intervals thus indicated, until the largest sized steel sound has been reached which the orifice of the urethra will admit without painful distension. It has even been proposed to enlarge the orifice of the urethra by incising it, in order to carry the dilatation still further, and thus increase the chances of permanent cure; this measure, however, is rarely justifiable.

When this degree of dilatation has been accomplished in a moderately favorable case of stricture, all the symptoms of the disease have usually disappeared, and the question arises—how far is the cure thus attained to be trusted as permanent? All sense of obstruction of the largest sized sound may have disappeared, and all thickening of the urethral wall at the seat of the contraction may have melted away under the influence of absorption, and yet, as the altered surface of the mucous membrane does not possess the power of covering itself with a healthy and normal epithelium, the action upon it of the urine, in the vast majority of cases, soon rekindles morbid action, and contraction slowly, but surely, reappears—after discontinuing the use of the sound at stated intervals. It is absolutely necessary therefore that the use of an instrument should be continued indefinitely; the intervals of its application may be elongated, closely watching for the reappearance of the first untoward symptom, at first from a week to a fortnight, and perhaps to a month—but beyond this it is rarely safe to go. You may ask—and must the patient continue the use of the instrument for the remainder of his life? These are the only terms on which immunity against return of the disease can be certainly guaranteed. It is my habit to teach the patient to introduce an instrument for himself, so that he is thus rendered more independent of surgical aid; and this practice I would recommend for intelligent and docile individuals. It happens occasionally that a patient who has been thus drilled falls into neglect of himself, and his stricture nevertheless does not thereby return—in other words, he is permanently cured; such cases are rare and exceptional—only serving to prove the existence of the rule I have laid down.

In a case of stricture, usually of some duration, the successful progress of its cure by dilatation may be arrested—by causes not easy to explain; the exudation may have become too permanently organized, or its degree of induration too considerable to yield, beyond a certain degree, to the treatment just described. The patient may not be able to give the requisite amount of time, or his stricture may be so sensitive, or irritable, as to render the process of systematic dilatation unbearably painful. In such a case, where there is no disease of bladder or kidneys, it is competent, after due preparation of the patient, to introduce a catheter of the largest size that his stricture will admit, and, confining it in its position by means of an adhesive plaster, or tape, and a split T-bandage, to leave it in the urethra for a period of 36 or 48 hours. The patient should be confined to bed, on his back, with pillows behind his knees to keep the thighs semi-flexed, and an appropriate cradle or frame so placed as to prevent the contact of the bed-clothes with the end of the instrument. This should be fitted with a plug of soft wood to secure the periodical discharge of the urine, or a tube of india-rubber should be attached to it for the purpose of conducting the urine into a convenient receptacle. In case of pain or much irritability, an anodyne suppository may be introduced into the rectum; if excessive pain or fever should follow, the instrument must be promptly removed. This however rarely occurs, but on the contrary, at the end of the time specified, the catheter, which was at first tightly grasped by the stricture, begins to move loosely in the urethra, a moderate amount of suppuration makes its appearance, and it may generally be removed and replaced by an instrument several sizes larger. At the expiration of another day this should be taken out, a warm hip-bath administered, and the patient allowed to rest for a day or two, in bed, without the catheter; at the

end of which time, if everything goes well, the same process is to be repeated with a large instrument as the stricture will admit. By this process, in the course of ten days a properly selected case of stricture may be safely and fully dilated. I prefer, usually, a flexible catheter, for this purpose, to one of silver, as it causes less uneasiness to the patient, and is not likely to produce ulceration by its unyielding pressure; the end of the catheter which is lodged in the bladder should project not more than an inch into its cavity, lest by contact with its wall on the opposite side, pain or even ulceration might be occasioned. The catheter should not be allowed to remain in the urethra longer than the period specified, as its eyes are liable to become obstructed, its extremity may become encrusted with phosphatic deposit, or an amount of inflammation may be excited in the urethral walls sufficient to give rise to subsequent thickening and induration. This mode of cure was originally styled by Dupuytren "*vital dilatation*," a term which is not distinctive, inasmuch as the absorption produced by the method first described is undeniably also a vital process. It effects absorption more rapidly, in consequence of the prolonged pressure to which the stricture is subjected, and the moderate amount of suppurative inflammation excited in it. In cases of stricture in which there is great liability to attacks of retention of urine, and which are complicated by false passages, which cause delay and uncertainty in the introduction of instruments for the purpose of gradual dilatation, this mode of treatment is advantageously adopted. It leads to prompt and successful results, and if applied to judiciously selected cases, and managed with caution, is moderately safe and sure.

COURSE OF LECTURES

ON

DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

SESSION 1860-61.

By A. JACOBI, M.D.,

PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE II.

ALTHOUGH the earliest development of teeth is of considerable importance, I shall not dwell upon it longer than is necessary to a simple elucidation of the process. A knowledge of the origin of the teeth, and their first development, is, however, required in order to understand the manner of their final protrusion through the gums. The rudiments of the teeth are observed as early as the sixth week of foetal life, when the embryo weighs but fifteen grains, and is little more than half an inch in length. A deep groove first appears lined with mucous membrane, within the external alveolar margin of the upper maxillary bone. It has been named, by Goodsir, the primitive dental groove. According to the concise description of the anatomical researches on the formation of teeth, given by Harrison, the germ of the anterior deciduous molar tooth is formed first, appearing as a small papilla on the floor of the primitive dental groove; next the germs of the canine teeth are formed in the same manner; and about the tenth week of foetal life those of the incisors, and lastly those of the posterior deciduous molar teeth. This *papillary* stage is followed by the *follicular* and *saccular*, from the fourth or fifth months of foetal life upwards. Delicate processes extend from the sides of the primitive dental grooves over each papilla, and by meeting before and behind it, inclose it in an open follicle. About this time the papillæ begin to change their form, and to assume that of the future teeth. The follicles become closed by membranous processes extending over the margins, and form sacs which continue from the fifth month of foetal life to the period of the eruption of the teeth at different periods after birth.

The osseous development of the teeth commences at this period. Without any preceding formation of cartilaginous substance we discover an osseous deposit on the dental pulp, which increasing in size from the surface of the sac, augments its volume from day to day. The dental pulp, wherever it is covered with this osseous layer, has a reddish tinge, more so than its other parts. The deposition of osseous matter on the dental pulp commences either from its surface, or from the contents of the sac, probably from either; the half-liquid contents of the sac continually increasing their percentage of phosphate of lime. When the ivory shell is formed in the dental sac, the interior of its parietal layer has a villous and vascular appearance, like mucous membrane, with a thin layer of granular matter upon it, which may be considered as a sort of epithelium lining the interior of the original follicles. This surface is the matrix of the enamel; it is impossible for this substance to be produced by or from the original pulp, or from its blood-vessels, as the latter has been enveloped in the ivory shell. The enamel appears first in minute crystalline, calcareous particles. It is not very hard, nor thick at first, but solidifies gradually and adheres closely to the ivory, from which it is separated by a thin membrane, like that which is separating the ivory from the pulp.

The cement forms a thin coating around the root or fang, and is formed by the lower or alveolar portion of the dental sac, which invests the root and adheres to it. The order of development of the single teeth depends on the general rule of solidification in the fetal body, which begins in the median line and progresses to either side simultaneously. Thus the inner incisors are formed first, and the posterior molar teeth last, with the exception of the canine, which appear later. Further, teeth in the lower jaw will develop earlier, in correspondence with the earlier ossification of the lower jaw in fetal life. A gradual development is also manifest in the number of dental pulps; in the third month of fetal life there are sixteen, in the fourth twenty.

After the teeth have been perfectly formed, ivory, cement, and enamel being deposited, they protrude from the jaw, penetrate the gums, and become visible in the cavity of the mouth, in consequence of the natural law of dental growth. The root of the tooth growing, the crown is propelled against the covering of the alveolar sac and the gums. The slight pressure produced thereby gives rise to gradual absorption of the osseous covering, and after this has disappeared, of the gums. By the continued growth of the root of the tooth, and by the progress in the development of the maxillary bone, the tooth is again propelled until the whole crown is visible.

The crown is the part developed first in the dental sac. With it, there is connected a thin and narrow osseous ring; this root of the tooth is gradually progressing to the depth of the dental cavity. While thus the length of the tooth is increasing downwards, the gums and the surface of the jaws are little changed. But with the progress of ossification, both in tooth and jaw, the later normal organization of the jaw becomes manifest. The dental cavity is lengthened, its osseous wall becoming more extended. But the growth of the tooth being more rapid, it commences pressing against the osseous covering. Resorption takes place, not only of the covering bone, but of its periosteum, of the gums, and finally of the mucous membrane of the mouth. In newborn infants the gums are hard, firm, and solid, so much so that it has long been called, though it is cellular tissue, by the term—dental cartilage. Before the cutting of the teeth it is, as it were, their representative, being the only means of taking a firm hold of the nipple. The gums will sometimes exhibit protuberances and cavities that look very much like teeth, the more so as these prominences are generally pale and of whitish color. The almost cartilaginous consistency of the gums disappears after birth; it gradually becomes soft in the course of a few months; its surface, instead of remaining sharp and pointed, grows blunt and thick, and even exhibits a sort of groove; being rounded only in those few cases in which the gums will be

affected with an inflammatory process. After the gums have obtained their soft and loose consistency, the penetration of the teeth finds naturally less difficulty.

Eichmann reports four hundred observations on dentition, with accurate notices of the time of the eruption of the several groups of teeth. He concludes that teeth do not appear singly, but generally in groups. The period of the protrusion of the several groups is as follows:—

Inferior (middle) incisors betw. the 28th and 32d week.

Superior " " " " 36th " 40th "

Anterior molar teeth " " 48th " 54th "

Canine teeth " " 16th " 18th month.

First posterior molar teeth " " 22d " 24th "

At the 27th or 30th month, there are twenty teeth in healthy children.

The following table from Ashburner shows how slight is the difference in the observations of authors.

7th month . . .	2 central lower incisors.
8th " . . .	2 " upper "
9th " . . .	2 lateral lower "
9th to 10th month	2 " upper "
12th " 14th " . .	4 first molar teeth.
16th " 18th " . .	2 lower canine teeth.
19th " 20th " . .	2 upper " "
23d " 30th " . .	4 last molar "

There is, in fact, but little difference between the two tables, and as a rule you will not find many deviations in healthy children.

The order which teeth generally follow in their appearance is sometimes changed. Thus Fox, in his account of the diseases which affect children during the first dentition, states that the molar teeth have protruded before the lateral incisors. Brunner, also, reports a case in which a molar tooth preceded the other teeth. Lambert found a canine tooth, the only one protruding, in an infant two weeks old, which grew $1\frac{1}{2}$ inches in two weeks. Raw mentions the case of an infant which had a canine tooth before an incisor, and Baumès reports the same anomaly to have been met with by a friend of his. Such, however, are rare exceptions to the rule, although anomalies of less extraordinary character will be found from time to time. Thus the lateral incisors will precede, sometimes, the central ones; or the incisors will first appear in the upper jaw, thus reversing the usual order, in which the lower is first to exhibit them. So regular, indeed, is the first appearance of teeth in the lower jaw, that children in whom the anomaly referred to occurs, are thought to be short-lived by the common people of some countries. Naumann thinks this belief is based on experience, and is inclined to regard it as a fact; and seeking to harmonize public opinion and science, he ventures to offer the following explanation, viz. the appearance of teeth first in the upper jaw proves a precocious development of the upper jaw, and, consequently, of the whole skull; the brain participates in this premature development, and increased irritation and cerebral symptoms necessarily follow. At a later period, in this course, I shall take occasion to show how much truth there is in this popular belief, by explaining in what manner abnormalities in the cutting of teeth are important, not as causes, but as symptoms, of anomalous development of the cranium in general; and in what manner the brain may be injured and life endangered by such anomalies.

A change in the order of the protrusion of the teeth is not the only anomaly that we meet with, for the time of their first protrusion will sometimes be found to differ much from the average age of their appearance. The first variation of this kind which I will notice, is the appearance of teeth at birth. This singular anomaly has now been observed many times, as the following examples which I have been able to collect, will abundantly prove:

The younger Pliny states that the renowned Marcus Curius, consul of the Roman republic 270 years before our era, had a full set of teeth at birth. This was the reason of his being named, Dentatus. The same author mentions the case of Papyrius, and of a lady, named Valeria, who had all

their teeth at birth. Zoroaster, the Persian legislator, is also reported to have had all his teeth at birth. The old historians, from whom Weinrich took the facts, probably thought he was destined to become the exponent of wisdom and morals, from being so extraordinarily and precociously gifted. Louis XIV. of France, whom some writers call the great, because he lived contemporaneously with some great men of his country, was born with two teeth; as was also his Secretary of State, Cardinal Mazarin. The celebrated Grotius, who then lived in France, prophesied that the royal baby would prove a dangerous character, and that like the nipples of his wet-nurses, bleeding and torn by the voracious infant, the neighboring sovereigns would be the subjects of the depredations and robberies of the future king. Scottus, in his *Physiologia curiosa*, relates, from a report of Nieremberg's, the case of a Spanish dwarf, who had all his teeth when born, and never lost one of them, got a beard in his seventh, and had a son in his tenth year. Old Heister repeats the report of Kauliz, of a child, born with two incisors, which soon turned black; the child grew thin and emaciated, and died with rachitis when a year old. In Büchner's collections there is the case of an infant, twelve days old, who had teeth, and died soon after of a papulous and vesicular eruption, with consecutive desquamation (hereditary syphilis?). Lanzoni reports the case of a newborn infant with two rows of teeth.

We learn from Schurig, that Crausius observed two incisors in the lower jaw of a foetus in the sixth month of utero-gestation. Schenk reports a similar case. It is stated in *Vita Peirescii*, that a woman gave birth to a child with long hair and teeth. Thomas Bartholinus is of the opinion that such congenital teeth are the cause of the vagitus uterinus. Gùldenkiel reports the case of the daughter of Navinius, an officer at Camenz, who was born with two incisors. Helwich has several cases of boys born with teeth in the lower jaw; and Daniel Ludovicus relates the cases of newborn girls, having teeth in either jaw, and injuring their tongues by them. Similar cases have been reported by Johann Rhodius, Goeckel, Mazarinus, Simon Majolus, Alexander Benedictus, Hildanus, Balduinus, and Polydorus Virgilius.

Gensel reports the case of a boy who was born with two incisors. Schlenck, E. von Siebold, J. Ph. Horn, Mercklin, and Storch, have seen the like, without, however, mentioning the sex of the children. Vesti relates the case of his own daughter, who was born with a tooth. Detharding observed a tooth in a foetus of six months; another in an infant three days old; and four teeth in a newborn infant. J. F. Lobstein gives the case of a child born twenty days after the ninth month of utero-gestation, with six incisors. Reveillé-Parise met with four canine teeth in an infant of four weeks, two of which had cut before birth; the development of the other teeth was equally precocious. Meissner saw two incisors in a newborn child, one of which fell out in the course of a few days; in another case the same thing happened, but a second tooth followed soon after, both of which were firmly imbedded in their alveoli and proved to be of the same nature as temporary teeth generally. Two incisors, observed in a newborn infant in the Paris foundling hospital, by Billard, fell out after six weeks. Mende observed two upper incisors in an infant; they were loose and movable, produced pain when touched; the mouth had an oblique direction, and the margins of the maxillæ were connected with each other. Although the teeth were extracted, the infant was unable to suck, and died of trismus on the fourth day after birth. Canton reports the case of a child in the practice of Dr. Tomes, born with two teeth in the lower jaw, by which the breast of the mother, and its own upper jaw, had been injured. On examination he found two sharp, rough incisors, protruding from the centre of the lower jaw. They were ill-shaped, imperfectly coated with enamel, and loose in the gum, and stood across, instead of in a line with the alveolar arch. They were removed, and it was found that the fangs were not more than one-third developed. In fact, the teeth had attained about the

normal amount of development for the age of the child, but had protruded through the gums before they were fitted for eruption. An after-process had been effected before the preparatory one had been completed. A similar case occurred in Canton's own practice. Brown mentions the case of a child born with the central incisors through the gums. They were extracted. Two other children were afterwards born of the same mother, in each of whom the same anomaly was found. All the children were females. The teeth were allowed to remain. Crump and Lethbridge have each observed a case of complete dentition at birth; the case of the former observer occurring in a still-born negro child. The sockets were very imperfectly formed. Baumès, while quoting the cases of congenital teeth observed by Columbus, Van Swieten, Marcellus Donatus, and Antigonus, reports the case of a French lady who bore a girl with two congenital incisors in the upper jaw, followed by two teeth on each side of the former, in the same jaw, three days afterwards. The infant died in convulsions. Richard III., and Mirabeau, the hero of the commencement of the great French revolution, had teeth when they were born. Similar cases are reported by Churchill, Fleming, Denman, while the celebrated Haller collected nineteen. I cannot conclude this long list without adding that Whitehead, the worthy professor and clinical teacher at Manchester, England, removed two teeth from the lower jaw of a newly born infant, in order to facilitate suckling. They were reproduced at the time when the canine teeth were formed, viz. after a year and a half, instead of the usual time of seven or eight months.

In Billard's opinion congenital teeth are not firm, but are liable to get loose, and be lost; but such is not the experience of Meissner and others. The last author is, as a rule, opposed to the advice of Billard, and the practice of Whitehead, of extracting such premature teeth when they prevent suckling. Meissner's opinion is, that no animal is prevented from sucking by the teeth in its mouth—a theory which is good enough for animals, but not for our race. Whitehead's case, in which it was necessary to remove a tooth to enable the mother to nurse the child, the fact that the nipples are very liable to become sore where the teeth are fully developed before weaning, and finally the few cases reported above, in which congenital teeth did not fall out to give place to the real temporary teeth, are valid proofs against such practice, at least in a number of cases.

Congenital teeth have been made the subject of special remarks by Dr. Nessel, professor of dental surgery at the University of Prague. As his opinions differ somewhat from others, I will state them more definitely. He removed congenital teeth in three cases. In his opinion, they are, properly speaking, not genuine teeth, as they differ greatly in substance and form, and especially in the nature and consistency of their exterior layer. They are less firm and solid, and their enamel is white, but thin, and not formed at all in some parts. They are not inclosed in the dental alveolus, but have a loose attachment merely to the gums. The real teeth will appear afterwards; and his impression is, that such precocious formations are principally observed in individuals who will show the symptoms of general scrofula in more advanced life. He therein coincides with Capuron's opinion, who always considers the premature appearance of teeth as a symptom of a morbid constitution. He removed them, not because of any inconvenience to the mother on nursing the infant, but because, in sucking, the tongue is brought forwards, and is liable to become sore and ulcerated from the continued contact. Some of Nessel's remarks correspond with Lassaignac's statements, who, by careful chemical investigations, found the teeth of younger animals to contain more organic matter than the older, as in the case of their bones; but he is certainly mistaken in regard to those congenital teeth which prove to be real temporary teeth.

In Whitehead's cases, and in some others, the extracted teeth were reproduced. The facts, however, are sufficiently numerous, proving that this will not take place in every

instance. Indeed it cannot, where the congenital are genuine deciduous teeth.

It is not at all desirable that deciduous teeth should fall out prematurely, or be removed, for the jaw thereby contracts, and undergoes a certain degree of atrophy, and consequently, when the permanent teeth appear, there is not sufficient room. Besides, the permanent teeth are larger than the deciduous teeth, and (as usually happens after the latter have fallen out, or been extracted) they, too, appear before the normal period; the jaw, then, not being sufficiently expanded, they are either out of the normal position, and are arranged in an irregular manner, or they are forced to form two rows. This anomaly cannot be remedied, because, as Canton justly observes, considerable changes take place in the form of the lower jaw-bone, as the child advances in years. The angle formed by the ascending portion, or ramus, is at birth very obtuse, inasmuch that under the age of four years it is impossible that the bone can be dislocated. The jaw enlarges, or increases in size at the posterior part, not near the chin, in order that the additional molar teeth which the child acquires at the second dentition, may find space, without disturbing or interfering with the teeth which correspond with those of the temporary set. This growth of the jaw continues up to the adult period of life, when all the permanent teeth have made their appearance. The ramus is then nearly vertical with the body of the maxilla, and forms a right angle with it. When, in old age, all the teeth have been lost, and the alveolar arch is closed by the absorption of the partitions of the sockets, the jaw again changes somewhat in shape, and is, apparently at least, thrown forwards. In some cases another occurrence will take place. The deciduous teeth may be firmly inclosed in the jaw and not give way to the onward pressure of the permanent set, which thereby are forced to change their direction, and protrude either in front of or behind the deciduous teeth. As in these cases the jaws are fully developed to their proper size, it is not only not injurious but absolutely necessary to remove the deciduous teeth in order to let the permanent set assume their normal position. A second variation is in the position of the teeth, and instead of one row normally developed otherwise, there are two or more. Columbus reports that one of his children had three rows of teeth. Valerius Maximus and Pliny relate similar facts. A son of Mithridates is said to have had two, and Hercules three. Arnold has met with a child of fourteen years having seventy-two teeth, thirty-six being contained in each jaw, and placed in two rows in a very regular manner, with the exception of the incisors, which exhibited some deviation. Baumès gives two similar cases, but in both the children were unhealthy, with feeble constitutions, and a scorbutic condition of their gums. Storch reports a case from an old collection of medical facts and essays; and Lanzoni gives instances of two rows in a new born infant; in a citizen of Ferrara; and lastly, in Louis XIII., King of France, who is said also to have had three rows, by some writers who exaggerate the expression of Bartholinus, who reports the case:—"Item duplii vel triplici ordine dentium, qualem in piscibus nonnullis vidi et qualem Ludovicus XIII. Galliarum rex habuit."

A third variation is the appearance of teeth at a later period than the normal one. Van Swieten gives the case of a girl whose osseous system was well developed, and health perfect, but who had no teeth before the nineteenth month. Rayger relates the case of a girl who got her four temporary canine teeth when thirteen years old; Fauchard, that of a child from five to six years, who had a few incisors only. Brouzet knew a child twelve years old who had but one half of the normal contingent set of teeth, the alveolar margin having the firmness and solidity of the gums of old age. Dugès has seen the first tooth appear in the eleventh, and Smellie in the twenty-first or twenty-second year. Lanzoni knew a child who had the first tooth, and the power of speaking intelligibly, in the seventh year. Ashburner reports the case of a very delicate though lively

child, with large head, tumid abdomen, and peculiarly small-sized extremities, who cut the first tooth, an upper incisor, at twenty-two months, and remarks that many cases of tardy access of speech, and of stammering, are connected with erroneous development of the teeth. Schoepf Merei, who relates the case of a child who had the first tooth at three months, and eleven at eleven months, has seen a child who had no teeth when several years of age. Maury attended a girl of seven years, who had not her first lower incisors, the space being sufficient for three teeth, and the alveolar processes being low and narrow. I have had under observation a boy to the age of two years and ten months, at which time he had not a tooth, nor a symptom of approaching dentition. The records of the Children's Department of the German Dispensary of the City of New York contain a similar instance in a child of two years of age. Amongst the four hundred observations on dentition reported by Eichmann, there were a few in which the first tooth cut at twenty-two months, and in a case described by Churchill the first tooth cut at seven years of age.

A fourth variation, of which there are a very small number of observations, consists in the absence of teeth. Botallus gives the case of a woman of sixty years who never had a tooth. Oudet is of the opinion that the cause of this anomaly must be looked for in an early inflammation and suppuration of the dental germs. Valla reports the case of Pherecrates, and Baumès that of an adult man who never had teeth.

The fifth anomaly is the absence of a number of teeth, instances of which are also on record. One or two have been mentioned by me. Storch describes the case of his own daughter, who had no canine teeth; Linderer that of a girl fifteen years old, who never had either of the four upper incisors. I have myself known a lady with but two upper incisors.

Finally, the following anomalies of doubtful character may be mentioned:—Plutarch and Valerius Maximus report, that Pyrrhus, king of Epirus, and a son of Prusias, king of Bithynia, had only one bone on each jaw, instead of the full contingent set of teeth. And Bernard Jengha was in possession of a skull, in the upper jaw of which (this being the only one found) only three dental masses were contained, the central one corresponding with the incisors and canine teeth, and each of the two exterior ones with five molars. Perhaps, however, these cases belong to the class of those described by Eustache and Sabatier, in which a number or a whole set of teeth were incrustated by a hard stony substance, thus producing the impression of a single dental mass, or a limited number of abnormally developed teeth.

As a rule, authors assert that teething at a later period interferes less with general health than at a premature period of life. Morbid symptoms in the former cases are stated to be less frequent. But delayed teething seldom stands as an isolated fact, but is an undoubted proof of some morbid condition in nutrition and general development. In the large majority of cases a notable retardation in the eruption of the teeth is but one of the symptoms of derangement and faulty development of the osseous system and the organism in general. The bones of the infant should be developed with the same equability as its other parts. Premature teething, premature walking, and premature ossification of the cranial bones, usually coexist; so do protracted teething, retardation of walking, and retardation of the ossification of the cranial bones and fontanelles. They are far from being favorable symptoms, and are too frequently the first symptoms of rachitis. Old Heister and Storch were already aware of this fact. To what extent the general health and constitutional vigor correspond with the formation of the teeth, and the development of the osseous system, is clearly shown by the following inquiries of Merei.

Of twenty healthy and robust children, the large cranial fontanel was closed in ten at from eleven to thirteen months; in five at thirteen; in two at fourteen; in two at ten; in

one at fifteen. In fourteen of these the first teeth cut at from six to eight months; in four at from eight to nine; in two before the sixth month. Consequently, there is, in healthy children, an interval of from four to seven months between the cutting of the first incisors and the closure of the fontanel.

Of eight feeble or sickly, but not rickety, children, the large fontanel was closed in six at from eleven to thirteen; in two at from thirteen to fourteen months of age. In seven of these the first incisors cut from four to seven months before the closure of the fontanel; in one the cutting of the first tooth, which took place at thirteen months, was directly succeeded by the closure of the fontanel. Thus it appears, that feeble, but not rachitic, children, differ little in the proportionate time in which the several parts of the anorganic portion of the body is developed, except that the general development is usually a little slower.

Of eight rickety children, the fontanel in three was closed in the thirteenth month; symptoms of rachitic mollification of the osseous system developed themselves immediately afterwards; the incisor teeth came at the regular time; the other ones too late. In three the ossification of the cranial fontanel took place between the sixteenth and nineteenth month, the first tooth having made its appearance at the age of twelve months, the others following in rapid succession. In one the large fontanel was open at nineteen months; the first teeth cut at the regular time, while rachitis was not yet present; but at eighteen months there were but eight teeth present. In one case of severe rachitis, neither the fontanel was closed, nor had the eruption of a single tooth taken place at the age of twenty-five months. I have deemed it important thus to consider the anomalies of dentition and the connexion of the eruption of teeth with the development of the osseous system, and finally allude, in passing, to its relations to the general health, and the constitution of the patient.

Original Communications.

HYGIENE OF THE SEWING MACHINE.

(READ BEFORE THE ACADEMY OF MEDICINE, NOV. 21, 1860.)

By A. K. GARDNER, M.D.,

PROFESSOR OF CLINICAL MIDWIFERY AND DISEASES OF FEMALES, IN THE NEW YORK MEDICAL COLLEGE.

ORIGINATORS of useful inventions are benefactors of mankind; yet the debt of gratitude which the world owes to every individual inventor, depends not entirely upon the result obtained by adding to the beauty, rapidity, or cheapness which may be given to any species of human industry. The deterioration to health and consequent shortness of life which may accompany the carrying out of the process of the manufacture are also to be taken into account. A recent writer in the *Edinburgh Review* has, in a very interesting manner, considered this question, in giving statistics respecting some of the various occupations of life. Every calling may be found to have an average mortality for those engaged in it—the gentleman of cultivated ease and the idler of no ease at all, who works to kill time, alike having their average length of life. The industrial man is really indebted to him who has by his genius enabled him to attain to an agreeable æsthetic, and far more, to an absolutely necessary result, with a diminution of time and cost; but enlightened humanity owes a boon of gratitude to him who accomplishes this end with a less cost of health and life. Man perhaps feels thankful to the artisan who found out that the beautiful Brussels lace may alone be manufactured in underground, dark, and damp rooms, when the bright light of day and the sun-dried air would contract

and twist and break those slender filaments of flax which form the gossamer substance of this frail ornament for the frailer creatures of clay; but the great heart of humanity should shout a pæan of praise to the man who at some future time, failing to effect the entire disuse of this material for ornamentation, may invent some plan whereby it can be made without the great sacrifice of the eyes—as a constant life in almost utter darkness can alone enable the weavers to attain to the delicacy of vision which will allow the perception of the slender meshes which they are to fashion into fairy-like meshes, and spider-net figures.

The lives that have been saved by the use of Humphrey Davy's Safety Lamp cannot be told, but he who will invent some way of adding to the life of the artisans in steel, will do infinitely more good, for we find that the span of life in Sheffield of the grinders of necessary cutlery is as follows:—

Dry grinders of forks,	29 years,
" " razors,	31 "
" " scissors,	32 "
" " edge tools and shears,	32 "
" " spring knives,	34 "
" " table knives,	35 "
" " saws,	38 "
" " sickles,	38 "

Look, too, at the makers of phosphorus matches and see the diseases in the jaw-bones ensuing therefrom; the makers of arsenical wall papers, the workers in lead, as the painter, plumber, cardmaker, *et id genus omne*.

We could with interest collect the statistics of the mortality of every calling in life, and show how each has its benefits and drawbacks. We would, however, prefer to turn to the various plans for the relief of these attendant evils, and show how ventilation lengthens life, that exercise strengthens the body and that both not only expand the mind, but by cultivating good digestion and a healthy body, prevent fretfulness, peevishness, irritability, and consequent sin. Sin is the consequence of bad health, first caused by the intestinal irritation of a green apple and now kept up by foul air, foul food, and fouler drinks.

Pleasant as such themes might be, we must turn at present to another branch of the subject, and from the general come to the particular, and show statistically how the health of the entire womankind has been benefited and is to be benefited by one recent invention. This I undertake from a deep feeling of interest in this great hygienic improvement, because I have carefully and assiduously studied the facts of the case for several years; and finally, because I am fully convinced that much error is current respecting this subject, not only among the community, but also among the medical faculty, who ought to know better, and who ought not to carelessly express crude opinions when they have abundant opportunity to form enlightened judgments.

The object of this paper then is to examine the invention of THE SEWING MACHINE IN A HYGIENIC POINT OF VIEW, and to bring before this learned and deliberative body the simple facts as I have found them. I claim that the sewing machine is the great boon of the nineteenth century to the women of Christendom and of the world—that it has *manumitted the white slave*.

The opinions here given are founded by many years' study of the working of machines of all patterns, among which may be enumerated those of Wheeler & Wilson, Grover & Baker, Finkle & Lyon, Singer, Connor, and many others. I shall narrate them in their simplicity, leaving all oratory respecting the improved condition of women, mothers, and shirt-maker; all questions of political economy as to the result effected upon the community by the general use of the sewing machine; questions of morality adduced by some; all matters extraneous to the simple question of healthfulness, to other times, places, and persons, and give only facts in this simple direction.

The world requires for a necessity a certain amount of sewing. The sewing machine does the work of twelve

persons—therefore either but a twelfth of the persons employed is necessary, or the work is done in a twelfth of the time. Supposing this work is done under the same circumstances of foul air and by the midnight lamp, the amaurotic eyes and the consumptive's hectic cheek are diminished to one twelfth. If by the diminished quantity of work, "nightwork" is dispensed with, the "eyelids weary and worn" are vastly diminished in number.

But here comes the argument which this paper is especially intended to meet; for it is alleged by some in objecting to sewing machines, first, that "sewing machine work is inferior in looks, strength, and consequent durability of wear to hand work (which statement, with a simple but very forcible denial, I pass by for more legitimate themes), and secondly, that the working of the machine not only aggravates but originates disease. This latter objection, like those once urged, that the thread was worn out by the needle in passing through the cloth, needs only to be looked at to be disproved. Time has shown that the thread does not pass through the cloth with anything like the frequency that it does in hand sewing, and ten years have shown that the health of the operators on machines of all varieties is in no respect injured by the working upon them.

I was one day making inquiries of a person who made fancy articles for sale, having had some six machines at work for many years, if she considered them healthy. The reply was, "Perfectly so; our girls are never sick, some have worked upon them for a year without losing a day." At that moment a lady came in, and bought a fancy garment, and on being urged to buy a half dozen replied: "Oh, no, I have bought this one for a pattern, I have a Wheeler & Wilson at home myself, and I shall easily run off 'a set.'" "But," says the seller, "it will never do for you to work a machine, it will injure your health." This is the kind and value of the opinions adverse to the sewing machine on the score of health.

The principal diseases said to be caused by the sewing machine are the so-called "female diseases" and spinal complaints. I have had some practice in these diseases, and may be allowed as a matter of personal experience to state that I have never seen a single patient who gained her living by working a sewing-machine, who was affected with leucorrhœa, "falling of the womb," "ulcerations of the womb," or spinal difficulty—who ever had an abortion while using it, or who in any way could trace any injury from it. Neither have I had any patients in private practice with any diseases at all attributable to it. I have had many patients who have made up their family and children's clothing for the season, and their "baby linen" just before their lying-in, with no injurious effects.

I am aware that the jar of the machine and the "up and down" vibratory motion are stated to produce abortions, but this seems to me to be a most erroneous opinion, inasmuch as the "jar" of the machine, if there is any, falls not upon the feet or lower extremities, in which it is not felt in the slightest degree, but entirely upon the arms of the operator resting upon the table; and from this undeniable reason, the alleged analogy between the hypothetical statement, that "the vitality of hen's eggs carried in cars and subject to their vibratory and oscillatory movement, is so destroyed that not one in a score will hatch," does not hold good, even if it can be proved that the human ovum in a healthy uterus is killed by this trembling movement, as is claimed by some. Upon this point I have also a word to say in a proper place. Overwork, and by one unaccustomed or disused to the sewing-machine, may, very probably, in some cases produce abortion, and so will a long walk in the Central Park, a day's shopping, excessive laughing even, the eating of a bunch of grapes; yet shall these be denied the parturient woman? Shall we take the exception for the rule?

With the view of learning the facts that actually exist, I have made as careful inquiries as I knew how, of those running large numbers of machines for manufacturing purposes, of the girls actually and for many years working upon

them, for their own experience and observation of those working by their side in the same factories, of physicians whose peculiar practice would lead them to note any general amount of disease among this class of girls, and now offer the result and many of the details of the inquiry.

Douglas & Sherwood, extensive manufacturers of skirts, for several years ran some two hundred and fifty of Wheeler and Wilson's machines constantly, and were, till a change in their business made less machine work necessary, in the daily use of more machines than any one else in the United States, and probably in the world. Mr. Sherwood, under whose daily supervision was this portion of the work, said to me, "That he had yet to see the first injurious effect from working a machine. Many girls who had come into his employ pale and weak, complaining of pain in the back, and at first unable to do a day's work, speedily became able to work their full nine hours, and became free from pain, robust, and healthy. He has never seen but one girl (who has a curvature in the spine between the shoulders) who was unable to use the machine. Many with spinal affections and curvatures, work full time without any bad results. The girls are rarely away from work from ill health. The girls, when they first come, after a day's work, are obliged to ride home from fatigue—but they soon walk home. Now, he finds that those who *sit sewing* in the old fashioned way, are so tired by night that almost all of them ride home, but the machine workers and those on their feet all day, walking around the hoop-frame, bending in every posture, now almost invariably walk to and from their homes, several miles distant. His own sister, who was fearful to try the machine, on account of a "weak back," has been enabled to use it ten and twelve hours a day, not only without injury but even with positive benefit, as her health has materially improved, since commencing it."

One lady in a private family stated that she had found an attack of neuralgia, to which she was very susceptible, to always ensue from the withdrawal of the animal heat through the iron foot-plate, whenever she wore thin slippers, but on covering the plate with a thick bit of carpeting such a result was never afterwards noted.

I have never heard of an instance of muscular rheumatism or cramps, affections most probable to be produced by such unusual exercise, arising from the use of any machine.

From a visit to the factory of *Payan & Carhart*, where fifty Wheeler and Wilson's, and fifty Singer's machines are in daily operation in the manufacture of clothing, I found that the heavy Singer's machines were worked by compressed air—that so much muscular force was required to carry the machine on at a *paying speed*, that pushing the needle through heavy beaver cloth and buckram, was too much for the muscular power of the girls—but with machinery they were enabled to run them as fast as might be desired. The working of these heavy machines with the foot did not, however, produce any disease. Exhaustion from overwork in this, as in every other overwork, was necessarily felt. The unanimous testimony was, that the machine had wrought a benefit upon the laborer. In particular it had enabled work to be so systematized as to make the employment of a large number of operatives, in large and well aerated and salubrious rooms, not only mutually profitable, but the workman could, from the system enabled to be introduced, make more wages in the factory than at home; thus the day was not as heretofore spent in a small apartment, containing bed, cooking-stove, children, work-bench, etc., but after a healthy morning's walk in a pure atmosphere and amid cheerful companions, again to be refreshed by the walk home after the labors of the day were finished. It was the opinion of those who worked for years on the board as journeymen tailors, and several years at the machine, that the latter was far better for health and spirits; that the mind was sharpened by the stimulus of the machinery, and the machine worker was intellectually brighter than the mere sewer.

(To be continued.)

Clinical Record.

UNIVERSITY MEDICAL COLLEGE.

PROF. ALFRED C. POST'S SURGICAL CLINIC.

Saturday, Nov. 17, 1880.

PORRIGO CAPITIS. MORBUS COXARIUS.

CASE XVI. *Porrigo*.—J. A., æt. 6 years, boy, was at the Clinic three weeks ago, when the whole face and scalp were covered with thick scabs, which are now mostly cleared off. The surface, however, is still red, and has the peculiar character of the original disease. At the first visit of the patient, the hair was directed to be cut short, and an emollient poultice applied; after which, the parts were ordered to be kept clean by frequent ablutions of warm water, and the following ointment was directed: R. Creasoti grt. x.; ungt. simp. 3 i. The patient is now in a much better condition; ablutions and ointment continued. The following medicine was also recommended: R. Pulv. rhei, carb. sodæ aa gr. ii.; pulv. ipecac. gr. one quarter; three times a day. To the face may be applied acet. plumbi 3 i.; aquæ Oii.

CASE XVII. *Morbus Coxarius*.—W. B., æt. 14, boy; has always been a delicate lad. The complaint is of four years' standing, and is supposed to have been induced by his taking cold while bathing. It commenced with pain in the left knee, with severe nocturnal exacerbations. In February last an abscess formed in the hip-joint of the corresponding side, which pointed and broke two inches or so below the lower trochanter on the outer side of the thigh. This disease is most frequent in childhood; it often occurs about puberty, or in early manhood. It may originate in the cancellated structure of the bone, ulceration of the cartilages of the joint, or in inflammation of the synovial membrane. The diagnosis of the origin of the disease in these three forms is obscure, but the course of the malady and the treatment are the same. It is divided in its progress into three stages: 1st. Lameness, and inability to bear the weight of the body on the affected limb; 2d. Apparent elongation and eversion of the limb, supposed to be from effusion into the capsule of the joint; 3d. Inversion and shortening of the limb after the capsular ligament is perforated and the pus or fluid is discharged. These changes of length of limb are, usually, merely apparent on inspection. Accurate measurement from the anterior superior process of the ilium to the internal malleolus of the tibia shows, as a general rule, that this statement is correct. The reason of this apparent change of length in the limb is owing to the tilting upwards of the pelvis to the affected side. The patient was placed on the bed on his back, and the feet being brought together, the apparent difference was about half an inch; on measurement of both limbs and comparing them, the shortening was found to be real. The sinus left by the opening above mentioned still remains, and discharges a thin ichorous pus. On passing a curved probe into the sinus, it was found to pass two and a half inches upwards towards the trochanter. There is, at present, evidence of an abscess situated over, and a little behind the trochanter major: this may be connected with the joint, or it may be periarticular. In either case, it should be opened. (An incision being made, a considerable quantity of pus was evacuated. The Professor remarked that if the point of the bistoury be thrust into an abscess, and then tilted up and brought out through the surface, and by a gentle drawing motion the blade be made to cut its way out, there is much less pain than by any other way of operating.) In this disease, the tendency is to permanent adduction and flexion of the thigh. The most important part of the treatment is keeping up extension, and rest. The first surgeon who recommended and practised extension in these cases was Dr. Harris of Philadelphia, who published a paper on the subject, more than twenty-five years ago, in the *Medical Examiner*. His apparatus was

similar to what is in use for making extension and counter-extension in fracture of the femur, and he kept his patients under treatment a year or more. This plan, though an excellent one, did not meet with favor in the profession. Some years after, Sir B. Brodie recommended a modification of the same plan of treatment; but this, although from so high an authority, did not meet with commendation by practitioners generally. His plan consisted of a counter-extending band under the perineum; a padded strap around the thigh above the condyles, to which was attached a cord passing over a pulley at the foot of the bed, to the end of which cord a weight was attached. Brodie himself did not thoroughly carry out this plan in many cases: it remained for an American surgeon, Dr. H. G. Davis, to invent and apply a means by which long-continued and sufficient extension can be made and kept up a length of time without detriment or much suffering to the patient. This consists of a broad piece of adhesive plaster extending from the upper part of the thigh on each side, which is kept in apposition to the limb by a roller bandage from the toes as high as it extends. The lower extremity of each strip of adhesive plaster is stitched to a firm piece of webbing, and these two pieces of webbing are attached to a cord which passes over a pulley, and has a weight of three to eight pounds attached to it. The plaster in use for extension is spread on Canton flannel instead of thin muslin, this being found to be stronger and better adapted to the purpose. This method of Dr. Davis of making extension of a limb, either in fracture or in the disease under consideration, answers every requirement, and may be considered one of the most practical and useful of modern inventions in surgical appliances. The principle of extension in both these affections is all important, and is destined before long to become universal wherever sound surgery is practised. Another important mechanical appliance in the treatment is a steel splint, properly known as Davis's splint, also the invention of Dr. Davis above alluded to. It is so arranged that both extension and counter-extension can be kept up, and yet the patient is enabled to leave his bed and go about, so that the tedium and confinement of the sick room can be exchanged for social enjoyments, riding in the open air, and other healthy recreations so necessary to one who has to contend against so serious and distressing a disease. Some modifications and improvements have been made in this splint by Dr. L. A. Sayre, and among some it is known as Sayre's splint, but the merit of the discovery rests with Dr. Davis.

Constitutional treatment is also very necessary. Tonic and supporting treatment, generous diet, and attention to the secretions and general health, are all important. The vital power of patients with this disease, especially if of long duration, is considerably below par, and consequently the main indication is to build up the strength, and enable the system to withstand the depressing effects of the disease. In the way of medicines, iron, quinine, iod. potassii, and other tonics and alteratives, are required according to circumstances. Cod-liver oil should be given when there is a tendency to emaciation. Local treatment is sometimes called for, such as leeches, when there is much inflammation about the affected joint, but all depletory measures should be used cautiously. Issues placed behind the trochanter were formerly very much in use, but now the opposite extreme seems to prevail, this remedy being scarcely ever resorted to. A medium course, however, in this matter is desirable, moxas, issues, and setons, often proving very beneficial when judiciously used. In the present case, treatment by extension and counter-extension was recommended, and the patient was directed to take iod. pot. gr. iv. and syrup iod. ferri grt. v. thrice a day. With regard to the local treatment an emollient poultice may be applied over the abscess; and it may be proper, after a time, to inject the sinuses with some mildly stimulating fluid, such as hydrg. bichlor. gr. ii.; aquæ Oi.

(To be continued.)

American Medical Times.

SATURDAY, DECEMBER 15, 1860.

HEALTH LAWS.

THE time of assembling of the State Legislatures is again at hand. At our own State Capital the appointed law-makers for nearly four millions of inhabitants will, in the course of a few days, commence their deliberations upon the rights and the interests of the people, and, we would fain hope, with noble purposes to promote human welfare.

Will the next Legislature provide a Sanitary Code for the city of New York? Shall the great interests and all claims of human life and health in this crowded centre of population and commerce be longer neglected by our legislators? Who among those chosen representatives of the people is prepared to introduce and properly advocate a comprehensive and practical plan for promoting the public health? It is to be hoped that among the hundred and sixty honorable gentlemen at Albany there may be a goodly number of the ablest and best members who will make sure work for the benefit of the people in this matter.

In the city of New York and its suburbs, including Brooklyn, dwells more than one-fourth part of the total population of the State; and it is an acknowledged fact that this million and a quarter of inhabitants is living under one of the most corrupt and corrupting municipal governments in the civilized world, and that reform without the interposition of State legislation is impracticable. Of all the municipal departments of government, that having charge of health and cleanliness is the most corrupt and reckless. It is called the Health Department, but that is a misnomer. It does little for health, but much for disease and death. Since 1844 there has been no medical adviser or executive medical officer in the department, and under existing laws that entire department is inevitably devoted to plunder and the *neglect of every sanitary duty*; and were it not for the unequalled salubrity of its location, New York would be so notoriously unhealthy as very seriously to diminish its commercial prosperity. Even in the present years of health, this city has the highest death-rate of any maritime city in Christendom, and exhibits its degraded estimate of human life by sacrificing annually to the Moloch of preventible disease more than seven thousand lives! Indeed, as estimated by the editor of the *Daily Times*, this criminal waste of human life annually amounts to more than nine thousand lives! Those of our readers who may not be familiar with the facts connected with this subject, should read the last Assembly Committee's Report on the Health Act, and the sanitary wants of New York, and also the Senate Committee's Report on the public health of the city. Those reports show why philanthropists and political economists should be interested in this subject.

To prevent disease and ameliorate human woes is the highest mission of medical knowledge; and true physicians have always been distinguished for efforts to promote health and guard human life. Persons who think otherwise of medicine and medical men, do not comprehend the

spirit and work of our profession. The appalling increase of the annual death-rate in this city, and the reckless disregard of the public health by the municipal government, induced the Academy of Medicine in 1856-7 to call the attention of the State Legislature to the sanitary wants of the city. Its views respecting the necessity of legislative interposition were embodied in a memorial and in a report which were presented to the Legislature. That was the first attempt made by the profession in this city, or in the State, to procure a reformation of our Health Laws. The memorial was favorably received, and a Health Bill was introduced in the Legislature, and found a few competent and warm-hearted supporters in such gentlemen as Hon. DR. BRADFORD and Hon. MR. BROOKS. But after many delays, that first effort at Sanitary legislation was effectually defeated by the paid agents of corrupt officials who succeeded, at a late period of the session, in sequestering or destroying all traces of the Bill, both manuscript and printed. The next year the Academy of Medicine renewed its memorials to the Legislature, and made commendable efforts to secure the enactment of suitable laws, but with no better success than in 1857. Yet by the Academy's memorials and reports to the Legislature a deep impression had been produced, and a profound conviction of the importance of the public health question so pervaded the minds of a considerable number of legislators that the Senate voluntarily appointed a committee of its own body, from the Five Metropolitan Senate districts, to make investigations and take testimony upon the subject. That honorable committee began their labors at a late period the subsequent Autumn, and until then they had manifestly entertained but an inadequate conception of the extent and importance of their undertaking. They were plain business men, whose political and personal interests were not to be advanced by recommending legislative interposition and radical reforms. But their inquiries elicited such convincing evidences of the imperative necessity for the "adoption of some action and efficient remedial measures," that they reported to the Legislature in favor of a sweeping reformation and thorough reorganization of the Health Department of the City Government. The committee affirmed that the health department as at present organized "does not accomplish the objects for which it was constituted;" and they, therefore, submitted to the Legislature an outline of a plan for its effectual reorganization. That plan was based upon the general truth that "preventive medicine is capable of exerting a vast influence over the welfare, physical and moral, of the human race," and they also express their conviction that for want of the application of the precepts of this science to the local management of the City of New York, it has suffered incalculably." —(*Senate Report on the Sanitary Condition of New York, 1859, p. 9.*)

The Senate Committee's Report was widely circulated, and it produced a profound impression in favor of reform. And it is a notable fact that the honorable Secretary of that Committee, Gen. P. M. WERMORE, became so impressed by the nature and importance of the evidence he had officially collected and analysed, that he was impelled to unite with medical men in an uncompromising and disinterested advocacy of the proposed reform. Boldly charging the crime of this neglect of the public welfare upon its real sources, that gentleman has continued to advocate and illustrate the importance of Sanitary improvements with an enthusiasm

and an intelligence seldom equalled among non-medical men. He has become the Chadwick of our metropolis. In the Chamber of Commerce he has so popularized this subject as to secure the unanimous and earnest co-operation of that body, and among his associates there, the distinguished civilian, Hon. GEO. OGDYKE, and other influential merchants, have united in the public advocacy of the reform.

It should here be mentioned, that previous to the publication of the Senate's Report, a large number of physicians and other citizens had united in a voluntary Association for the purpose of encouraging sanitary inquiries, and hygienic improvements. But again, notwithstanding the great influence of the Committee's Report, and the co-operation of the Sanitary Association, the Health Bill of 1859 was defeated by the same *material aid* and agencies of official corruption as in 1857 and 1858;—upwards of ten thousand dollars having been assessed upon certain officials, and used to kill the Health Bill.

The New York Sanitary Association having become thoroughly organized as a permanent institution, it appointed a committee to report upon a Sanitary Code; and after more than six months of inquiry and preparation, the draft of a Health Act was reported to the Association, and by that body transmitted to the Legislature. This was universally admitted to be a far more comprehensive and effective measure than had previously been proposed, and it received the cordial support of all good men. The unpartisan press unanimously supported the measure; but the party leaders, while they fully endorsed it, hesitated to urge a reform which proposed to remove the Health Department beyond the reach of all political parties, and devote it solely to the service and good of the people. The leading papers in the state pronounced the Health Bill a purely beneficent and very necessary Act. The *Times* declared it to be "the most popular and most important measure before the Legislature;" and, regardless of party interests and official intimidation, the latter paper nobly advocated the Bill, and elaborately discussed the subject. In addition to the agency of the press, the proposed measure had the combined support of the prominent merchants and best known citizens, who urged the enactment. But all good influences were impotent when opposed by log-rolling corruption, gridiron railroads' prizes, and the tempting gold that had been accumulated by depleting assessments upon the over-paid attachés of the so-called Health Department with its hundred and twenty-five thousand dollars of unearned salaries.

The Health Bill of 1860 was finally defeated, but its principles were not lost, nor were the friends of reform disheartened at the defeat. To-day they stand in the same uncompromising position in the defence and advocacy of sanitary reform, and a strictly medical polity in the administration of the department of public health in every city and town in the land.

It is conceded that the city of New York must be provided with a Health Department, framed upon a medical and scientific basis, and that the uncontrollable influence of municipal corruption, patronage, and conflicting partisan interests, will render it utterly impossible to effect the necessary reforms without the interposition of the Legislature. And, further, it is the bounden duty of the State to provide the laws required for the protection of the life and health of the people. To the Legislature, therefore, we must continue to appeal on this subject.

To the medical profession throughout the State we now appeal for their timely co-operation and aid in bringing the question of Health reform to the attention of members elect of the Legislature. What is done for the city of New York is done for the entire State and country.

If any Health Bill is sent to the capital by the friends of sanitary improvement, we have reason to believe it will be a well considered and greatly improved measure, against which no just objections can be urged. But of this fact we may be assured—there will be no attempt to hide our purposes. As medical men, we invite attention to the laws of life and health; and as friends of humanity, familiar with the causes and conditions of human suffering, we ask for laws and executive means to guard our fellow creatures from the preventible causes of disease. Will not every physician in the State make it his special duty to confer with the legislators from his own district, and urge upon them the duty of giving early attention to the public Health Act? If this were faithfully done by our brethren, and if timely efforts were made by the county medical societies, we verily believe that not the Metropolitan District alone, but the whole State, might next spring rejoice in the inauguration of sanitary improvements under a General Code of Health.

THE WEEK.

A most important change has just been effected in the medical service of the hospitals of the Almshouse Department, under the care of the COMMISSIONERS OF CHARITIES AND CORRECTIONS. The Island Hospitals, heretofore under the supervision of a Resident Physician, Dr. SANGER, have been consolidated with Bellevue Hospital, and the entire medical supervision is confided to the Medical Board of the latter Hospital. At a joint meeting of the Commissioners and the Medical Board, PRESIDENT DRAPER, on the part of the Commissioners, submitted the following statement:—

The medical department under the government of the Commissioners of Charities and Corrections is to be united under one medical organization, excepting Randall's Island and the Lunatic Asylum. It will embrace, beside Bellevue Hospital, the care of the patients of the Penitentiary, Almshouse, Workhouse, Island Hospital, and Small-Pox Hospital. It is proposed:

1st. That the Medical Board furnish the proper substitute for the supervision of the patients, all that can be or ever has been furnished by the Resident Physician.

2d. The necessary provision shall be made for the conveyance of such force to meet the requirements on the Island.

3d. The patients are to be at all times provided with ample attendance, permanently defined and provided for.

4th. The whole government to be so arranged that a due regard shall be had for the economy of the arrangement.

5th. There will be required a complete system of attendance with the utmost punctuality.

6th. Every facility to be given to the transfer from one institution to the other of all cases coming under the government of the institution.

The Medical Board have accepted the service, and Dr. JAMES R. WOOD and Dr. B. W. MACREADY have commenced regular attendance. This change is a most salutary one, and is destined to improve the hospital appointments of the Department. The Bellevue Hospital being devoted to acute, and the Island Hospital to chronic diseases, the latter is designed to be the recipient of the convalescents and incurables of the former. But while these two hospitals remain under separate heads there is liable to be a constant

feeling of rivalry, and the regular and proper transfer of patients can never be effected; while the result of this misunderstanding is serious detriment to the patients. But under one medical supervision these hospitals, which are but divisions of one institution, can be rendered in the highest degree serviceable.

THE Richmond County Gazette, a high-toned and ably edited local paper, has some just strictures, and makes some excellent suggestions upon Boards of Health in towns. Alluding to the needless panic and the useless measures of some of the towns' Boards of Health on Staten Island, the Gazette says, that the system stands very much in need of reform, and the editor thus explains his views:—

"As originally contemplated, no doubt these organizations were intended, by the framers of the law, for application to extraordinary emergencies, such as the prevalence of devastating epidemics, etc., so the convening of a Board of Health, being attributed to some necessity of this sort, is of itself the occasion of a panic, always causing more detriment to the community, from the interruption of business, etc., than can be compensated for by any of the profound sanitary measures that usually emanate from these authorities, even when the public health demands relief. But admitting that emergencies may arise, in which it is desirable that a body clothed with the legal authority of our Boards of Health should exist, it will be found, and must be apparent to all, that very little that appertains to the preservation or amelioration of the public health is ever performed by these bodies. *We believe that medical matters can only be properly managed by medical men*, and would therefore urge that the common consent of the community should impose upon the County Medical Society the responsibility of recommending the sanitary measures that may be necessary for the preservation of the public health in the season of epidemics, and of suggesting preventative measures applicable to all seasons.

"There is scarcely a practising physician on the Island who does not perform annually, without fee or reward, more real justice to the public than all our Boards of Health put together. All the medical aid that the large proportion of the poor among us receive is obtained from this source, or not at all. The Boards of Health do nothing for the sick poor. Let the medical society hold weekly meetings, and organize out-door relief for the poor—voluntary aid would soon be forthcoming from the benevolent to defray the necessary expenses; a reciprocal confidence and respect would be engendered between the profession and the community which would lead the latter to look to their natural health guardians in time of panic and pestilence—and the expensive and ridiculous machinery of Boards of Health would soon die out."

This is a sensible proposition, and we trust that the Richmond County Medical Society will take the hint, and show what can be effected by such a voluntary enterprise. If a Metropolitan Health District should ever be formed, it should include Staten Island, and the medical profession of Richmond County should be represented in the general Board of Health. Local Boards of Health without a medical element, as constituted under existing statutes, are a misnomer and a nuisance. They breed more panics and pestilences than they cure.

DR. MOFFATT's remarks in another column, respecting his experience in the employment of *silver sutures* in all kinds of surgical operations in which sutures are required, furnish the testimony we have expected from practical surgery on this subject. The peculiar utility of the silver wire suture,

in particular operations, has been sufficiently demonstrated, and is universally acknowledged by the best surgeons; but when Dr. Sims two years ago ventured to intimate that this suture would prove to be of "*universal applicability in general surgery*," not a few of our best surgeons were disposed to regard the idea, as the sanguine but unattainable hope, of that ingenious confrère who introduced and first properly taught and illustrated the preparation and use of this valuable improvement. But such testimony as we now publish from the Physician-in-chief of the Seamen's Retreat, with an experience extending over several years in that great surgical hospital, where there are from 1,200 to 2,000 patients annually, treated with results not exceeded in any other institution in our country—Such testimony, we say, is more reliable than any merely negative, theoretical conclusions.

THE case of Mrs. Frisch, the insane murderess, who was recently convicted of taking the life of her little daughter, in Genesee county, has resulted as we had feared, yet for the credit of humanity had hoped. *The woman is, and has long been, hopelessly insane*, though regarded by *herself*, her friends, and most of the local physicians of the vicinity, as being *perfectly sane*, and consequently morally responsible for her last horrible infanticide, as well as her former murders. We learn that for several weeks past this convicted murderess has been so completely insane as to leave no doubt as to the real and fatal character of her cerebral and mental malady, which had previously been decisively affirmed by Dr. Edward Hall, of the Convict Asylum, whom Governor Morgan had wisely employed to decide for him the unsettled question of the lady's insanity. Five times was she placed on trial for homicide; at last was convicted of murder; finally, had her sentence of death humanely commuted to imprisonment for life, and now goes to finish her few remaining days in the Lunatics' Home at Utica. We need no better comment than this case would furnish for an argument in favor of a Commission of Lunacy or a Court of Experts. In a future number of the TIMES we shall present a brief history of Mrs. Frisch's case.

The New York Tribune states that it is to receive over \$31,000 for one year's insertion of a quack advertisement in its daily, semi-weekly, and weekly issues. It states that this will prove a profitable investment to the advertiser, in which case this enormous sum of money will, of course, be drawn from the readers of that paper, and be paid back to the quack, for his worthless preparation. The universal panacea now put forward is called the "Cephalic Pills." We hope the profession will, as far as possible, prevent this "Enterprising Business Man," as he is styled, from realizing the contemplated profits from his investment.

The Lancet and Observer (Cincinnati) retracts its charge against the Long Island College, but, gathering courage from defeat, it declares its intention of laying before the profession the irregularities of even our most respectable schools! We venture to suggest that when it undertakes another expedition against a *respectable* school, it determine positively whether it has a real foe to contend with, or some phantom conjured up by its own jealousies. We learn that in Cincinnati it is now held to be "editorial courtesy" to give "the proof, and the name of the person furnishing it," in connexion with the charge made against a party. This could not have been the rule about Sept. 1, 1860, or the Lancet and Observer "sadly departed" from it.

Reviews.

INTRODUCTION TO STRUCTURAL AND SYSTEMATIC BOTANY, AND VEGETABLE PHYSIOLOGY, being a fifth and revised edition of the Botanical Text-Book, illustrated with over thirteen hundred woodcuts. By ASA GRAY, M.D., Fisher Prof. of Natural History in Harvard University. New York: Ivison, Phinney & Co. 1860. pp. 555.

THE science of botany, as a collateral branch of medicine, is grievously neglected by medical students, owing to the laxity of our educating bodies. It should be sufficient to urge its study as a part of the general education of a member of a liberal profession, but in this utilitarian age we must give a reason of a more substantial kind. We will therefore add that botany is essentially a branch of medicine, a knowledge of which is often of practical value to the physician. It enables him to study the peculiarities in that kingdom of nature from which is drawn the largest class of his remedies, and thereby avail himself of many useful agents which might otherwise escape his notice. So impressed is the profession of other countries with the importance of botany as a department of medical knowledge, that it enters into the course of study, and the student must qualify himself as much in that as in anatomy. This is right, and we hope the day is not distant when the American student of medicine will also be compelled to pass an examination on this branch.

The text-book of Prof. Gray ranks deservedly as the first work which is devoted principally to the study of the structure and physiology of plants. Commencing with the elementary organization of plants, it traces the development of their individual parts, and points out the physiological laws which govern their growth. The concluding portion of the work is devoted to systematic botany, or the principles of classification. The style of the author is at once simple, clear, and definite, and admirably adapted to the easy comprehension of the student. The work is profusely illustrated with finely executed woodcuts.

We cannot take leave of this work without again urging the study of botany, at least the elementary portion, upon students of medicine. And we would recommend the young practitioner, who locates in the country, to select as one of the first and most desirable works for a library, *Gray's Structural and Systematic Botany*.

BED-CASE. By WALTER CHANNING, M.D., Boston. 1860.

DR. CHANNING, who is always facetious as well as edifying in all that he writes, furnishes us in this little tract with a curious phase of disease now unhappily too common, the most prominent symptom of which is a *vis inertiae* and a *decubital proclivity* of the most obstinate character. These cases are originally psychological in their nature, and simulate certain well known forms of hypochondria, the often instantaneous cure proving that no lesions of the muscular or locomotive apparatus do in fact exist. Whoever reads Dr. Channing's brochure will find much to reflect upon in the facts so well set forth by him, nor will he fail to detect among many of his own bed-ridden female patients some to whom better than all tonics would be the command "*Arise, take up thy bed and walk.*"

RECHERCHES TÉRATOLOGIQUES, sur l'appareil séminal de l'Homme, par Ernest Godard. 8vo. pp. 104. Paris. 1860.

DR. GODARD is already known to the profession as the author of a monograph on *Monorchidism and Cryptorchidism* which occupies a deservedly high rank among elementary works. In the one under consideration he has confined himself to malconformations of the seminal apparatus in man, involving either a total absence of the testes, or an occlusion of their excretory canal, both which, when established, either congenitally or otherwise, equally impair the generative faculty. The subject is one of an eminently curious character from the great infrequency of its manifestations, and Dr. Godard has handled it in a manner at once thorough and exhaustive. Superadding to the observations of others much that has been collected in his own hospital practice, he is enabled to speak with an authority, and a power to explain himself, from ocular acquaintance with the subject, that is not often possessed by authors. And, indeed, in this branch of pathological anatomy it is permitted physicians to be somewhat unlearned, because cases of such malformation as Dr. Godard descants upon, are extremely rare; many a practitioner, however extensive his observation, often passing through life without seeing half a dozen cases of sexual teratology. Therefore it is that a historical collection of such cases must be eminently useful not only to the anatomist, but also to the medical jurist. In this latter view, the present monograph, with its fifteen illustrative lithographs, will be found to deserve a place on the shelves of every medical library. Its typographic execution is also deserving of note as a beautiful specimen of Parisian art, and one alike creditable to the publisher, and gratifying to the reader.

COMPENDIUM OF HUMAN HISTOLOGY. By C. MOREL, Prof. Agrégé à la Faculté de Médecine de Strasbourg. Illustrated by twenty-eight Plates. Translated and Edited by W. H. VAN BUREN, M.D., Prof. of General and Descriptive Anatomy in the University of New York. New York: Baillière Brothers. 1861. pp. 207.

THE above work is intended to furnish the student with a clear and concise exposition of the minute structure of the human body. In the present issue, the original French plates are retained, while the text has been rendered into English by Prof. Van Buren.

At the present day, instruction in Microscopic anatomy forms a necessary part of a sound and thorough medical education. In fact, the science of physiology cannot be taught without constant reference to the elementary constituents of the various tissues and organs, and to the part which these perform in carrying on the vital processes. In the study of pathology, too, the aid of the microscope is equally indispensable. There are but few facts in morbid anatomy which cannot be rendered more intelligible by the use of this instrument, while without it, many textural alterations, especially in their early stages, would escape observation altogether. It is invaluable to the practitioner, as indicating the diagnosis and treatment of renal and other diseases. Notwithstanding the objections, therefore, that have sometimes been urged against its employment, there can be no doubt that, in skilful hands, the microscope is an instrument of immense value—affording, as it

does, a vast amount of positive knowledge that can be obtained in no other way. It is gratifying to observe, in this connexion, an increasing desire on the part of the rising generation of medical men, to become familiar with the use of this instrument as a means of research. Within the past ten years, numerous excellent works have appeared, which describe the manner of its employment in medical and scientific investigation. It is within the same brief period also, that the Student has been able to obtain private instruction in microscopic anatomy and manipulation—instruction which now forms a prominent feature of private medical teaching.

In the prosecution of ordinary descriptive anatomy, there are three different methods of acquiring the desired information. The first employs simply a written description of the various organs; the second resorts to pictorial illustrations; and the third consists in the direct examination of the organs themselves by dissection. While it cannot be denied that the latter mode is absolutely necessary to the acquisition of accurate and practical knowledge, it is nevertheless true, that great assistance may be derived from the inspection of well executed drawings of the organs under examination. The same rule holds good in the study of general or microscopic anatomy. The student should neglect no opportunity of examining with the microscope the elementary structures themselves, and of making himself practically familiar with the manipulations necessary for their exhibition; but, since he does not always enjoy these opportunities, he will be able to gain a very fair acquaintance with the subject by the aid of plates accompanied with a written description, postponing until some future time the advantages of direct personal investigation.

The treatise of M. Morel is admirably adapted to the wants of the medical student. Omitting the discussion of doubtful and unsettled points as foreign to the purpose of his work, the author has succeeded in giving within the compass of about 200 pages, a succinct but comprehensive account of the principal facts in human microscopic anatomy. These facts are clearly, and for the most part correctly, stated; a few inaccuracies are noticeable, however, which may probably be attributed to the author's desire for brevity of expression. For example, at page 108, in describing the epithelial lining of the uriniferous tubes, it is remarked, that "fatty degeneration of these cells is the principal lesion of the urinary tubules in Bright's disease," whereas it is well known that fatty degeneration is characteristic of only one of the morbid conditions, and that not the one most frequently met with, to which this term is applied. Chapter vii., which treats of Glands, is one of the best in the book, and it is rendered still more useful and attractive by the labors of the Translator, who has given, at considerable length, the results of the investigations of Isaacs on the kidney, Walters on the lungs, and Beale on the liver. The plates, 28 in number, are original; they are admirable both in design and execution, and convey an accurate impression of what they are intended to represent. Prof. Van Buren deserves the thanks of the student for placing within his reach a work on histology which is not equalled by any other of similar size, and which is exceedingly well calculated to serve as an introduction to the more voluminous and elaborate treatises of Kölliker and others on the same subject.

PHYSICIAN'S DIARY.

I. RECORDS OF DAILY PRACTICE: A Scientific Visiting List for Physicians and Surgeons. New York: Baillière Brothers.

At some period in his life every physician has to regret that he has not been more careful in preserving notes of his daily practice. However firmly impressed upon his memory are the leading features of his more interesting cases, he finds that the aggregate of his experience is but dimly and vaguely remembered. We urge young practitioners to commence with systematically recording their cases, important and unimportant; and to accomplish this with as little waste of time as possible, we recommend the work before us. It is not a regular visiting list, but a note-book of daily practice. It is so arranged that the practitioner can note down at the bed-side the various points of interest in each individual case, from day to day, and thus preserve for future reference every important fact.

II. THE PHYSICIAN'S VISITING LIST, DIARY, AND BOOK OF ENGAGEMENTS, for 1861. Philadelphia: Lindsay and Blakiston.

THIS is a physician's daily visiting list, and is arranged in convenient form for recording every visit, with memoranda of wants, obstetric and vaccination engagements, &c., &c., &c. It has long been in use, and has met with great favor with physicians.

III.—THE PHYSICIAN'S DIARY FOR 1861. Buffalo: Breed, Butler & Co. New York: S. S. & W. Wood.

THIS Diary has, in addition to the simple entry of visits, columns for briefly recording the case. The Obstetric Record, also, has columns for entering the more important features of each case. It concludes with divisions for entering the addresses of nurses, list of things loaned, and bills presented.

IV.—THE PHYSICIAN'S HAND-BOOK OF PRACTICE, for 1861. BY WILLIAM ELMER, M.D. New York: W. A. Townsend & Co.

THIS is the most elaborately prepared diary which we have received, it being, in fact, what its name indicates, a hand-book of practice. The first portion of the work contains a carefully prepared classification of diseases, with their symptoms, and references to the various remedies employed. Following this is a list of remedial agents, with directions for their administration. The first portion of the work concludes with a list of poisons and their incompatibles. In addition to the practical features of this part already mentioned, we find also "The Ready Method of Marshall Hall" for recovering the drowned, with illustrative figures; a list of incompatibles; the manner of preparing the various medicated baths; rules for prescribing and extemporaneous prescriptions, etc. etc. This vast amount of practical matter, which comes within the scope of the physician's every day duties, is so condensed as scarcely to increase the bulk of the work. The diary of this work is on an entirely different plan from any other with which we are acquainted, affording facilities not only for recording daily visits, but also for noting the general symptoms in columns properly headed. The obstetric record, also, enables the practitioner to note, under proper heads, every fact of importance. We regard Dr. Elmer's work as a most valuable Hand-Book of Practice, especially to the country physician.

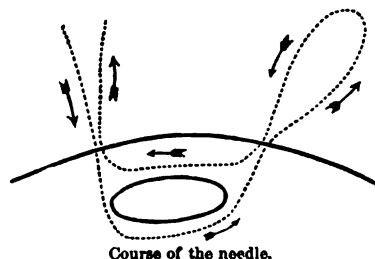
Progress of Medical Science.

PRACTICAL SURGERY.

The Subcutaneous Application of the Metallic Ligature to the cure of Varicose Veins of the Leg. By Dr. R. J. LEVIS (Medical and Surgical Reporter, November 17).—Dr. Levis thus describes his operation:—To perform the operation it is important that the veins be distended, so as well to determine their outlines and avoid any risk of wounding them. This may be accomplished by putting a band around the limb above the knee, while the patient is in the erect position; or this may be rendered unnecessary by performing the operation whilst the patient continues standing. If the latter position be chosen, the patient, in order to have the leg at a convenient height, stands on a chair or table which is placed by a wall, against which he steadies himself. The points chosen for ligature are, first, the trunk of the saphena, at the highest point where there is evidence that, owing to the abnormal dilatation, its valvular structure is imperfect; then the largest and most superficial veins, at places where they are most isolated; and, finally, those in the neighborhood of ulcers or eczematous eruptions of the integument. The only instruments and appliances essential are a long straight needle, some silver or iron wire, adhesive or isinglass plaster, and a roller bandage. The needle should be straight, and two and a half or three inches in length, and differing from the common surgical needle in having a sharp, round point, which *perforates without cutting*. In the absence of a needle properly adapted for carrying the wire ligature, an ordinary fine darning needle will be quite suitable. Experience has proved to me that a straight needle is much more manageable for directing the point accurately than the usual curved one, and the policy of avoiding the cutting or spear point, where, as in the varicose state, even the innumerable venous capillaries are often in a varicose condition, and which, when wounded, pour out blood profusely into the cellular tissue, is obvious. The wire had better be of a fine gauge, as number thirty, or finer. Pieces of adhesive, or isinglass plaster, the latter preferred, one or two inches square, are useful. The bandage may be six or eight yards in length, and two and a half inches wide. A wire-twister is a convenience but not an essential to the operation. The patient being in a proper position, the operation is commenced by feeling for the edge of the vein to be ligated, and entering the needle perpendicularly until a point beneath the under surface of the vein is reached. Then the shaft of the needle is depressed and its point pushed horizontally beneath the vein until it makes its exit through the integument on the opposite side of the vein. The exit is facilitated by pressing on the integument with the fingers of the left hand over the point of the needle. After the needle is withdrawn, leaving a wire beneath the vein, it is *reentered at the same orifice*, but this time passes *above the vein*, traversing the space between the integument and the vein, and makes its exit *at the point of original entrance*. A slight pulling on the wire draws beneath the skin the loop of wire left on the opposite side of the vein, and all that is seen of the wire is its two ends projecting from the same orifice. Thus the vein is surrounded by a single wire. Proper care will avoid a risk of wounding the vein, but if there should be evidence that this has occurred, the needle ought to be at once withdrawn and another point for the operation selected. The accompanying outlines, to make the matter more explicit, illustrate the course of the needle and wire, and the manner in which the wire encircles the vein.

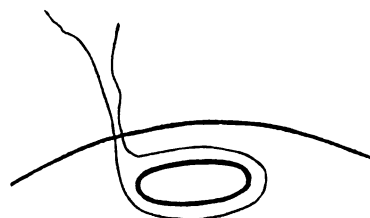
The wires are then pulled sufficiently tight to simply constrict the vein, approximate its sides, and stop the circulation through its calibre. The object, be it understood, is not to induce a rapid ulceration through the coats of the vein. In this, my own practice differs from the directions

generally given for the ligature of varicose veins, and on this peculiarity, perhaps, depends its apparently absolute



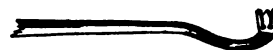
Course of the needle.

safety. It is true that to insure a perfect closure of a varix it is necessary that it should be actually divided, but this division is best accomplished slowly, and only after the slight pressure on its walls has excited within a plastic exu-



Wire surrounding the vein before being tightened.

dation which agglutinates them. Exposure of an opened vein to a pyogenic surface is in this way with certainty avoided. The pressure made on the vein by pulling the ends of the wire is secured by twisting them. This may be done by means of the fingers, forceps, or the wire twister. A simple form of the latter instrument, which I prefer, being easily placed on the wires without threading through holes, as in the form of instrument generally used, is herewith represented.



Wire Twister.

The wire is finally cut off, leaving an inch or more, which is laid flat upon the skin; the place of operation is covered with a small piece of adhesive or isinglass plaster, and a roller bandage envelopes the limb up to the knee. If an ulcer exists on the limb, it is to be simply covered, previously to the application of the bandage, with several thicknesses of dry lint. The patient rests horizontally, without disturbance of the dressing, for ten or twelve days. After this time all dressing is removed, and traction is daily made on the wires to accelerate their removal. But little more confinement of the patient is usually requisite. Decided relief from swelling of the varices is experienced, and he is frequently able to walk about with comfort long before the wires are removed. In one of my cases, a laborer had two wires remain in his leg for eight weeks, during the latter part of which time he continued his occupation with but little inconvenience; in another case the ligatures, six in number, were all spontaneously removed on the fourteenth day. On removal of the bandage on the leg, the ulcer, if dependent on the varicose condition, usually seems to be really *dried up*, and cicatrization rapidly follows.

CHLOROFORM ASPHYXIA.—Mr. Fowler, of Southampton, recommends vigorously slapping with the flat hand the naked surface of the body and limbs, and flapping the face and front of the chest with the corner of a wet towel, which induces a deep inspiration.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Oct. 24, 1860.

E. KRACKOWIZER, M.D., President, in the Chair.

POLYPUS UTERI—OPERATION—MISCARRIAGE.

DR. CONANT presented a specimen of uterine polypus which he had removed from a pregnant female on the 9th of October last. The tumor was attached to the body of the uterus at the junction of its neck. The patient, about four or five months ago, became unwell, as she supposed, in the usual way, but the hemorrhage did not entirely cease up to the time she presented herself to Dr. C. On examination he found a red tumor presenting itself through the os, and advised its removal. The operation was performed the following day by Maisonneuve's instrument. During the day after the operation she suffered very little from hemorrhage, and remarked that she felt easier than she had done for nine months before. On the third day she was up and about the house, when she began to complain of pain in the region of the uterus, which condition of things continued three days, when he was called in haste to see her. Small doses of morphine were given repeatedly, and the pain ceased in the course of the next three hours. After being entirely free from suffering for a day or two the pains came on again and she miscarried before assistance could reach her. About three or four days after the miscarriage a thick membrane of organized plasma was discharged, apparently large enough to cover the whole internal surface of the uterine cavity.

EXTIRPATION OF THE EYE FOR STAPHYLOMA OF THE CORNEA.

DR. NOYES exhibited an eye extirpated four days before. It had staphyloma of the cornea, the consequence of purulent ophthalmia in infancy. The patient was eighteen years old, and the staphylomatous eye had begun to give trouble to the sound one. The extirpation was done by the method of enucleating the globe from the tunica vaginalis oculi, so as to leave the muscles of their full length within the orbit. The parts especially exhibited in the specimen were the choroid coat and the optic nerve. The former, by long continued chronic congestion, had become much atrophied. This was seen in the pigment, which over all its extent was very thin, and at the posterior hole of the eye was so much removed as to show the sclerotic shining through over a large patch. The vessels of the chorois capillaris could be distinctly seen as pale curved lines running through the pigment. The absorption of pigment in this case was extreme, and resembled that found by the ophthalmoscope in many cases of enfeebled sight. Where the pigment of the hexagonal cells was partly absorbed, the pale pink lines of the vasa vorticosa came into view. The optic nerve was deeply depressed. This excavation was the result of the same internal pressure which made the cornea bulge forwards. The depression was precisely that seen in advanced glaucoma, having steep perpendicular sides and sharply defined. In this respect the optic excavation differed from that caused by atrophy of the nerve, the latter being shallow like a saucer. The other changes of the eye, the opaque cornea, adherent iris, occluded pupil, and fluid vitreous humor, were those ordinarily seen. The lens was entirely transparent.

DR. WOOD remarked that the operation for extirpation of the eye used to be a very rare one, but with the new method by a multiplication of the operation for strabismus it became a very simple affair. He remarked that he had performed the operation repeatedly, and that it had always been satisfactory; a beautiful stump was left for the artificial eye; the patient was relieved from any inflammation in a stump

formed by part of the eye itself as in the old operation, and the establishment of any sympathetic action in the well eye was prevented.

DR. NOYES remarked that in the New York Eye Infirmary there had never been known any case in which serious consequences followed the new operation for extirpation; the wound generally healed in ten days, and within a fortnight the patient was ready for the artificial eye.

DR. MARKOE asked if the stump left after the new operation was as good as that after the old operation.

DR. NOYES replied that it appeared to move as well, but the artificial eye seemed to be more sunken.

DR. MARKOE thought that that was an objection to the operation.

DR. WOOD maintained that in the majority of cases where extirpation was performed, it was for the purpose of affording relief to the opposite eye. The cases that had been operated upon at Bellevue were for that purpose.

HYPERTROPHY OF LEFT VENTRICLE—SUDDEN DEATH.

DR. FINNELL presented, on behalf of Dr. Gallagher, a heart taken from a woman thirty-five years of age, who dropped dead in the street. On examination after death, the organ was found to be much enlarged, the diseased action being confined almost entirely to the left ventricle. There was also atheromatous deposit in the aorta, most abundant just above the aortic valves. There were no evidences of rupture of the coats of the artery.

DR. CLARK asked Dr. Finnell what had been his observation in regard to the kind of lesion that terminated in sudden death. In this case, said Dr. Clark, the remarkable difference between the right and left ventricle is one of the most striking features of the disease; it would seem that the capacity of the left ventricle must have been equal to four or five times that of the right. As regards the character of lesions that produce this sudden death, my own observation has not extended beyond the fact that, as a rule, it does not occur in simple hypertrophy, but that there must be valvular disease present. I raise this point for the purpose more particularly of directing attention to this matter. It is a point worthy of particular inquiry, inasmuch as every physician who sees a case of disease of the heart is called upon to answer the question whether or not his patient will die suddenly. My own observation only enables me to say to men who have hypertrophy alone, that they are not going to die suddenly; if we can extend our information so as to designate which particular valvular lesion is liable to be followed by sudden death, a great advance will be made.

DR. FINNELL did not recollect a case of sudden death which had occurred in consequence of simple hypertrophy. He had made up his mind that such a termination of life was due almost always to the presence of aneurismal dilatation of the aorta above the valves.

DR. KRACKOWIZER asked whether more cases of sudden death occurred from disease of the bicuspid than from the aortic valves.

DR. FINNELL's attention had never been directed to that point.

DR. FINNELL presented a second specimen consisting of the lungs and heart of an infant. It was ailing for two weeks before its death with erysipelas of the leg, from which disease it apparently died. At the post-mortem examination, a small portion of the lower lobe was in a state of atelectasis. The foramen ovale was sufficiently large to allow the passage through it of a number four catheter.

EXSECTION OF ELBOW.

DR. FINNELL exhibited an arm removed from the body of Mary Lilly, who died suddenly from intemperance. He merely presented the specimen for the purpose of showing the condition of things after resection of the elbow-joint. The joint being laid open, the two condyles of the humerus were found wanting. The lower end of the humerus and

the articular surfaces of the radius and ulna were separated about an inch from each other. The radius and ulna were ankylosed, and the greater sigmoid cavity was almost entirely obliterated. The lower end of the humerus had not made a false joint for itself, but was sharp and abrupt. There were no evidences of any attempt to form new bone, and the whole presented very much the appearance of a recent compound fracture. No fistulous opening existed at the time of death.

Dr. Jones remarked, that the patient entered Bellevue hospital about nine years ago, during his term of service as house-surgeon to that institution. The operation had been performed by Dr. J. O. Stone for fracture at the elbow-joint, the two condyles of the humerus having been removed. He also stated, that Dr. Stone brought the case to the notice of the Academy of Medicine as an instance of the good effect of conservative surgery.

Dr. Woon stated, that he recollected the various circumstances attending the operation. The wound united speedily, and the patient was enabled to use her arm in due time, the only motion that she was deprived of being that of pronation and supination, which was occasioned by ankylosis between the radius and ulna. We find here, then, continued he, that the end of the humerus is absorbed as in cases of ununited fracture, the tissues in the neighborhood are consolidated, and a bursa is formed at the severed portion. The semilunar cavity of the olecranon has lost its characteristic appearance, and the head of the radius is here represented with a bursa over it. I am not sure but that at times the lower end of the humerus was not in contact with the upper head of the radius. Taking the case altogether, it is a unique and very interesting one, and I have no doubt but that Dr. Stone will be pleased to hear of the final result of it.

CHRONIC INFLAMMATION OF UTERUS AND FALLOPIAN TUBES; CYSTIC DEGENERATION OF OVARIES.

Dr. SANDS exhibited a uterus taken from the body of a prostitute, 37 years of age, who died of apoplexy. The specimen showed very well the effects of chronic inflammation upon the organ; its walls were exceedingly thick; the canal of the cervix and cavity of the body of the organ were both increased; the thickness of the mucous membrane was also very considerable. The whole organ was increased to several times its natural bulk. Adhesions existed between the Fallopian tubes and posterior surface of the uterus; on the left side the fimbriated extremity could be seen, which, however, was not the case upon the opposite side. One of the Graafian vesicles of the left ovary contained clotted blood, but the organ upon the opposite side was the seat of commencing cystic degeneration. In conclusion, Dr. Sands alluded to the fact, that adhesions of the Fallopian tubes and their appendages were more commonly met with in prostitutes than in any other class of females, and asked for an explanation as to the cause.

Correspondence.

SILVER SUTURE.—CHLORATE OF POTASH IN PHTHISIS.—VARICOSE VEINS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I desire in the informal manner of a letter to give my experience in this Institution in the employment of certain remedies, in regard to the utility of which the profession is not settled.

1. *Silver Suture.*—In the use of the silver suture, for the introduction of which we are indebted to our talented and accomplished friend, Dr. Sims, I have had considerable

experience. For three years past I have used nothing else in operations of every kind where sutures have been required. In all amputations, from that of the thigh to the fingers, I have almost invariably employed the silver suture alone. Its advantages are manifold and palpable; indeed, I can heartily subscribe to all that an enthusiastic friend has said of them, so far as my experience will warrant me in saying anything at all. My custom is, in large amputations, to put in so many of them as perfectly to coaptate the flaps, and to leave them in as long as they subserve any useful purpose. They may be allowed to remain for an indefinite period without the risk of exciting undue inflammation or even irritation. I have often left them in until after the stump had healed entirely, without occasioning inconvenience of any kind. They always hold the parts in more perfect apposition than silk can do, for the reason that they do not appear to cause any suppuration at all.

2. *Chlorate of Potash in Phthisis.*—My experiments in the use of the chlorate of potash in phthisis, as employed by Dr. Fountain, of Iowa, have not yet been of sufficient duration to warrant me in speaking of it with very great confidence; but I am encouraged to persevere in the use of it more and more daily. One patient in the advanced stage of the disease in question has been using it in $\frac{1}{2}$ oz. doses daily for eight days. Before commencing this treatment his breathing was difficult, and hurried upon the slightest exertion; his lips were livid, and extremities cold. He was able to get but little sleep, owing to an almost constant cough; and his appetite, never good, was sometimes so poor that he could take no nourishment at all for an entire day. His general appearance now strongly confirms the testimony which he gives, that he sleeps nearly all night undisturbed. The pain and constriction of the chest are much relieved, and expectoration, formerly quite profuse, has ceased almost entirely. His condition in every respect is materially improved. Two other patients, also in advanced phthisis, have been using the article but three or four days. One of them speaks confidently of decided improvement, and says that he breathes freer, and sleeps and eats better. None of them complain, as yet, of any inconvenience whatever from the use of it. I hope to be able to test the efficacy of this article in the incipient stage of the terrible scourge in question, which swells our mortality list to nearly one-half, and everywhere is proverbially destructive among the men of the sea.

3. *Persulphate of Iron in the Treatment of Varicose Veins.*—The following case may not be uninteresting, as it bears testimony to the excellence of an operation for the obliteration of varicose veins of the lower extremities, which was performed by my friend and collaborer, the late Dr. Isaacs, of Brooklyn. The subject of this operation is a sailor, forty-five years of age, of rather impaired constitution, who had followed the sea for thirty-four years. He came under our care for the treatment of a very unhealthy looking ulcer, of long standing, upon the lower third of the tibial side of the left leg. All the superficial veins of the leg were very much enlarged and tortuous, especially in the popliteal region; one very prominent coil lying over the outer hamstring tendons was of enormous calibre. Placing a tourniquet upon this above, and making pressure below so as to isolate about two inches of the vein, I threw into it eight drops of the persulphuret of iron diluted with as much water. (Squibb.) The instrument used was the syringe commonly employed for injecting morphia into the cellular tissue. After a few minutes the pressure was removed, and a hard plug remained; the blood coagulated almost instantly. The inflammation which followed was not immoderate. Cooling anodyne lotions were applied, and subsequently lead poultices. A very slight amount of suppuration resulted, and the wound healed up kindly. The ulcer closed rapidly, and in just three weeks the limb was perfectly cured. Not a trace of the enormous veins of the leg is now visible. There can be but little doubt, I think, that this is the simplest, safest, and by far the easiest method of dealing with these troublesome difficulties. Having a case

of varicocele in the house shortly after this operation, I determined to try the same experiment upon the enlarged veins of the scrotum. In this case but four drops of the iron were used. Instant coagulation ensued. The whole mass of veins became involved in the tumor which formed of about the size of an egg, and for some days he suffered somewhat from pain shooting up along the cord. The inflammation gradually subsided; the tumor dwindled in size and gave him no longer any pain. The hardness has now almost disappeared, and the peculiar worm-like feel of the part, invariable in all these cases, is no longer perceptible.

T. C. MOFFATT, M.D.

SEAMAN'S RETREAT, Staten Island, Nov. 24, 1860.

FOREIGN CORRESPONDENCE.

Letter from DAVID P. SMITH, M.D.

EDINBURGH.

October 26.

Nov. 6.—Prof. Bennett commenced his Winter course of clinical medicine to-day by delivering a terse and epigrammatic lecture upon diagnosis. Having attended closely to his instructions in the wards for the last month, and having greatly profited thereby, I can testify to the excellence of his clinical instruction. Every facility is afforded to the student to enable him to learn thoroughly the normal and abnormal sounds of the heart and lungs by auscultation and percussion, for which the large wards of the Royal Infirmary furnish ample opportunity. The previous history of every case is carefully gone into, and every endeavor made to place prominently before the class every symptom and characteristic of every case at each visit. It may be well for me to state that, in my reports from time to time of what I see in medicine and surgery, while abroad, I shall not give prominence to strange and wonderful cases, but shall endeavor to give as plain an account as possible of the ordinary everyday practice—conduct—in medicine and surgery, of those men whose names are familiar to us all as household words. I shall use as few words as possible, and indulge in no lengthy descriptions.

Nov. 7.—This evening, by invitation of Dr. Brodie, I attended a meeting of the Medico-Chirurgical Society. Mr. Edwards showed an amputated arm, the elbow-joint of which had been excised some time before. Although carious disease had returned after the exsection, and necessitated removal of the arm, there was very plainly to be seen great progress towards the formation of new condyles, etc., etc. The joints formed after exsection of the elbow here are wonderfully perfect, as evinced by the almost unimpaired freedom of motion. The great rule to be followed, so as to obtain this result, is to remove quite a large amount of bone. Dr. Handyside read the report of a case where he had amputated the thigh of a lad, about 16 years old, just below the trochanters, for spreading traumatic gangrene resulting from compound fracture of leg and laceration of tissues in the ham. Acupressure needles were used instead of ligatures upon the arteries with perfect success. The operation was performed when the lad was in a very desperate condition. The refusal of the parents to allow the operation caused it to be postponed until gangrene had nearly reached the body, and the glands in the groin were greatly swollen. Three ounces of blood only were lost in the operation, four acupressure needles were used, and, according to the operator, were applied with much greater ease and celerity than is usual with ligatures. The one on the minor artery was removed at the end of fifty-one hours, the others earlier. There was no hemorrhage, and no suppuration in the track of the needles. Convalescence was retarded only by the occurrence of suppuration in the glands in the groin, which discharged pus for two or three days. In reply to Prof. Miller, Dr. Handyside said that the arteries, at the time of the operation, *sputated* with the usual vivacity. The case was extremely well reported by Dr. Handyside—who, it

will be remembered, amputated at the hip some time since successfully—and gave rise to much discussion as to the amount of credit to be given to the needles. Prof. Miller, while acknowledging the rare success of the operation, doubted whether the needles were to be praised for the result. He did not agree with those who apprehended trouble from the pressure of the ligatures in a corner of the wound; but even thought that they served a useful purpose by draining off the pus and causing the wound to heal from the bottom. He thought that the great preventive of union by first intention was not the ligatures but blood between the cut surfaces. He thought surgeons had advanced backwards since Liston's time, in giving up his plan of placing wet lint between the flaps and waiting an hour or two, or until all oozing had ceased, and the cut surface was glazed over with liquor sanguinis, before closing the wound. Several spoke in favor of the needles, and also some against them, arguing that the pressure antagonizing the pressure on the artery must prove hurtful. A good deal of personal feeling got mixed up with the scientific question, showing at least that the needles prick and cause some mental if not corporeal irritation. It seemed to be agreed that they were competent to control large arteries, but that the assumption that they produced less irritation than ligatures was *not proven*, and required careful and *unprejudiced* trial in a variety of cases.

Nov. 8.—To-day Mr. Syme showed a case of morbus coxarius occurring in a man 23 years of age. It had been going on for about one year, and the thigh was rigidly flexed upon the abdomen. Mr. S. remarked that the exact pathological state of the parts concerned in this disease had not yet been determined, and that he thought the opinion of Sir B. Brodie, that the disease began in ulceration of the cartilages, was incorrect. He himself thought the disease began in the bones. He discarded setons and issues, and trusted to perfect rest to obtain a cure. In order to obtain that perfect rest the long thigh splint was used. The man being placed under the influence of chloroform, the limb was straightened and the splint applied, and fastened to the limb by a broad cloth wrapped around both.

A case of *fistula in ano* operated upon to-day deserves notice on account of the peculiar attitude in which Mr. Syme places one for the operation, which is on the back with the legs raised high in air. A case of hydrocele of the neck was shown, and injected with iodine, which was left in.

The cases in the medical wards under care of Prof. Bennett are many and various, but for many reasons difficult to give a report of in short communications. A diuretic much used by Prof. B. is B. Ammoniac acetat. 3ij.; spirit. æther. nitrici f3 iij.; aquæ ad uncias sex. M. One tablespoonful every four hours.

A case of itch furnished opportunity for remarking that all ointments, even sulphur ointment, used for the cure of this disease owe their efficacy to the lard entirely. In fact, the case which has been treated for seven days with inunction of mere simple cerate is now well. Heart diseases and phthisis are very common here; so that a very excellent opportunity is offered to any student to become familiar with every variety of these diseases. For example, one evening I visit the Infirmary for the purpose of studying heart disease, and am enabled to auscultate twenty or thirty cases, at my leisure, with the house physician, hearing the remarks of the Prof. on the same cases the day after. Again, the multitude of cases of phthisis furnish unlimited opportunities for the study of all phenomena connected with morbid states of the lungs. I spend most of my evenings in the Infirmary examining the infinite variety of diseases there present. Every noon from twelve to two the wards are visited by the Professor, and case after case rigidly examined, each member of the advanced class acting in turn as examiner. Typhus fever has been quite prevalent here of late, characterized by great prostration, delirium, and a mulberry rash, or menial eruption. It is treated by careful and systematic nourishment, carbonate of ammonia, wine, and brandy.

Medical News.

PERSONAL.

DR. GLOVER PERIN, Assistant Surgeon U. S. A., is in Cincinnati, on a four months leave of absence; his station for six years has been Fort Craig, New Mexico.—Prof. WEBER gave the introductory lecture to the Cleveland Medical College, Nov. 7, on "The Importance of the Physical Education of Infants."—Dr. J. H. BUTLER, Resident Physician of the Baltimore Infirmary, has been appointed Demonstrator of Anatomy in the University of Maryland.—Prof. DUNGLISON is stated to have just published a dictionary for the blind, arranged with raised letters.—Dr. BATCHELER's method of treating in-growing toe nail is highly spoken of by Dr. J. R. Black, of Ohio, in the Cincinnati *Lancet and Observer*.—Dr. W. E. ARNOLD states that Dr. Walton, of Ohio, originated the treatment of congestive chills by chloroform.—Prof. EVE reports a successful case of staphylococci with the canulated needle.—Prof. BLACKMAN has lost a patient by the admission of air into the veins during an operation.

DR. SIMPSON.—It is stated on good authority that the visit of the Empress of the French to Scotland, is for the purpose of consulting Dr. Simpson.

PATHOLOGICAL SOCIETY.—At the last meeting of the Pathological Society (Dec. 12), the following specimens were presented:—Fibrous degeneration of the spleen; and granular kidney, by Prof. Clark; malignant tumor of the breast, by Prof. Parker; Fracture of the anatomical neck and tubercles of the os brachii, by Dr. Buck; Excised olecranon, by Dr. Hutchison.

SURGERY AMONG THE MORMONS.—The Mormon theology contemplates the cure of diseases by miraculous interposition; hence, the disciples of the healing art are not held in much estimation. The church authorities are exceedingly jealous at an attempt to cure by ordinary therapeutics, and denounce from the pulpit any invasion of their special province. Though they claim for the "laying on of hands" (cheirapsia) wonderful efficacy, the number of deformities, the result of malpractice, to be seen in any of the populous towns, rather indicates a necessity for the use of carnal means. The art of surgery is at a low ebb.—*Assist. Surg. Bartholow, Army Reports.*

UNIVERSALITY OF SCROFULA.—Dr. Gregory of Edinburgh has asserted as his belief that not a single family in Great Britain was exempt from scrofulous taint.

THE NEW YORK SANITARY ASSOCIATION held its Second Annual Meeting on the 6th inst. Gen. F. E. Mather was elected President; Robert H. McCleary, Esq., and Dr. A. C. Post, Vice Presidents; Dr. Elisha Harris, Corresponding Secretary; Dr. Wm. R. Donaghe, Recording Secretary; Nathaniel Hayden, Treasurer; W. B. Roberts, Librarian; Elected Members of Council, Messrs. Peter Cooper, H. T. Cleveland, E. L. Vièlè, and P. M. Wetmore, and Drs. Isaac Wood, G. H. Griscom, J. Frankel, and Stephen Smith. The Annual Report of the Association gives a summary of the proceedings during the year, and lucidly presents the objects of the Association, and the importance of sanitary inquiries and hygienic improvements. It is proposed by this working organization, that in connexion with its other labors a system of practical instruction and advice upon the applications of the principles of hygiene in the affairs of daily life shall be carried to the homes of the ignorant and the poor, by means of plainly prepared tracts and cards of special rules and instruction relating to diet, nutrition, personal habits, and health. With its nearly three hundred members, this Association should exert a decided influence and accomplish great good.

COMMUNICATIONS have been received from:—

Dr. H. N. EASTMAN, N. Y.; Dr. J. W. LAWTON, Conn.; Dr. J. TELFORD, N. Y.; Dr. J. C. REEVE, O.; Dr. B. W. CARPENTER, Vt.; Dr. S. CLARK, Ill.; Dr. H. P. HALL, Vt.; Dr. T. E. RANDOLPH, Miss.; Dr. C. D. BUDD, N. Y.; Dr. L. C. MCCONNELL, O.; Dr. E. S. BLISS, N. Y.; Dr. J. McCANAGHEY, Pa.; Dr. S. T. BROOKS, C. E.; Dr. J. F. CUTTER, Ill.; Dr. G. W. GILDEA, O.; Dr. R. M. PECK, Conn.; Dr. G. W. JONES, C. W.; Dr. D. R. MARTIN, Iowa; Dr. A. R. NEUSOM, Miss.; Dr. W. WOODWARD, N. Y.; Dr. D. A. McLANE, O.; Dr. T. ARNER, N. Y.; Dr. S. J. SAWYER, Wisc.; STACY HEMENWAY, Ill.; Dr. W. H. BOONE, N. Y.; Dr. J. E. REEVES, Va.; Dr. W. M. THOMPSON, N. Y.; Dr. J. L. SMITH.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 1st day of December to the 8th day of December, 1860.

Deaths.—Men, 81; women, 81; boys, 82; girls, 91—total, 335. Adults, 162; children, 176; males, 163; females, 173; colored, 1. Infants under two years of age, 104. Among the causes of death we notice:—Infantile convulsions, 18; croup, 8; diphtheria, 7; scarlet fever, 29; typhus and typhoid fevers, 6; consumption, 46; small-pox, 6; dropsy of head, 11; infantile marasmus, 14; inflammation of brain, 10; of lungs, 32; bronchitis, 8; congestion of brain, 7; of lungs, 5; hooping cough, 1; measles, 1.

Dec.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Fels.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	°	°	°	°	°		0 to 10	In.
1st	29.84	.11	84	80	40	5	8	N.E.	5	
2d	29.51	.21	82	28	85	4	6	N.W.	3	
3d	29.77	.21	88	19	40	5	8	N.W.	3	
4th	29.64	.84	32	28	35	8	5	N.E.	10	.6
5th	29.64	.11	81	28	84	8	5	W.	1	
6th	29.71	.17	80	25	36	4	5	S.W.	4	
7th	29.84	.21	84	23	40	5	8	S.W.	5	

REMARKS.—1st, Light snow, and blowy P.M.; 2d, wind fresh A.M., with a few clouds; 3d, cloudy P.M.; 4th, snow all day; 6th, cloudy P.M.; 7th, cloudy A.M.

MEDICAL DIARY OF THE WEEK.

Monday, Dec. 17.	{	NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M.
	{	BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
Tuesday, Dec. 18.	{	EYE INFIRMARY, Diseases of Eye, 12 M.
	{	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
Wednesday, Dec. 19.	{	EYE INFIRMARY, Diseases of Ear, 12 M.
	{	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
Thursday, Dec. 20.	{	BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
	{	EYE INFIRMARY, Operations, 12 M.
Friday, Dec. 21.	{	NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M.
	{	BELLEVUE HOSPITAL, Dr. Sayre, half-past 1 P.M.
Saturday, Dec. 22.	{	N. Y. ACADEMY OF MEDICINE, half-past 7 P.M.
	{	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
	{	NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M.
	{	BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M.
	{	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
	{	BELLEVUE HOSPITAL, Dr. Church 1½ P.M.
	{	EYE INFIRMARY, Diseases of Eye, 12 M.
	{	BELLEVUE HOSP., Dr. Wood, half-past 1 P.M.
	{	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
	{	NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M.
	{	EMIGRANTS' HOSP., Ward's Island, Dr. Carnochan, 8 P.M.
	{	EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

BELLEVUE HOSPITAL.—On Saturday (this day), Dec. 15, Dr. JAMES R. WOOD will continue his course of lectures on operative surgery.

BELLEVUE HOSPITAL.—On Wednesday, Dec. 19, Dr. LEWIS A. SAYRE will deliver a clinical lecture on morbus coxarius, and divide the contracted muscles.

THE NEW YORK SANITARY ASSOCIATION.—There will be a special meeting of this association on Thursday evening, the 20th inst., at which a report will be read on woman's influence, interest, and agency in promoting sanitary improvements. Addresses will also be made by distinguished speakers.

THE SURGICAL SECTION OF THE ACADEMY OF MEDICINE will meet as usual at the house of Dr. JAMES R. WOOD, on Thursday, Dec. 21, at 8 P.M.; subject for discussion, OPERATION UPON JOINTS.

Original Lectures.

COURSE OF LECTURES ON DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

SESSION 1860-61.

By A. JACOBI, M.D.,

PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE III.

Anomalies of the enamel both morbid and healthy—Milk teeth in hereditary syphilis, rachitis, and scrofula—Influence of malnutrition, abuse of sugar—Physiological remarks on appropriate food—Attention to milk teeth—Their influence on digestion and pronunciation—Cleanliness—Sucking bags—Extraction of milk teeth and its influence on permanent teeth.

THE enamel of the teeth is subject to several anomalies. It may be either defective or discolored. Its defective formation appears either in excavations dispersed over the surface of the tooth, or there are complete furrows or transversal notches around the crown of the tooth, the body being still covered with, or entirely deprived of enamel. This atrophy is the result of those severe diseases which the child may have been suffering from during the development of the enamel. Acute exanthems are said to produce the dispersed excavations; acute inflammatory diseases the furrows; and rachitis has often been observed to be the cause of the entire absence of the enamel. The incisors of rachitic children are usually small, appear late, and are very liable to become carious. Acute exanthems are counted among the causes of this anomaly, especially by such writers as classify the teeth with the dermal tissue. Small-pox is related to produce isolated excavations which have a great similarity to the cicatrices remaining after small-pox. To vaccination also some have attributed the defective development of the enamel. Such children as were vaccinated before any tooth appeared, or after their complete development, had finer teeth than those who were vaccinated during their protrusion and growth.

According to Prof. Nessel, the age can be determined in which a child was affected with a severe disease, from the species of teeth affected, and the distance from the top of the crown in which excavations or furrows are found. If the incisors and the first molars are defective in enamel, the disease ran its course between the twelfth and eighteenth months, whereas a disease of the fourth or fifth year will leave its vestiges in the second molars. The longer its duration, the broader the furrows. When disease returns at different periods, there are often furrows at different heights. Prof. Nessel is of the opinion that this abnormal condition is the effect of a severe disease, influencing as well the membrane outside the ivory, from which the enamel is deposited, as any other part of the organism, but does not depend on supposed abnormal acidity of the liquid contained in the dental sac. For if this were the cause we should expect the enamel to be defective all over below the line that was formed before the disease occurred. Whichever may be the cause, the anomaly cannot be removed. It would be aggravated by levelling the surface of the tooth, as extensive caries would be the immediate consequence.

Another anomaly of the enamel is its discoloration. Brownish spots are the result of original development and composition. White spots are sometimes the effects of mechanical injuries producing local disorganization of the enamel. They consist of carbonate of lime instead of the

phosphate and fluide, and from the fragility of the enamel at these places are apt to give rise to carious degeneration.

The anomalies described cannot be mistaken for those irregularities of shape, such as furrows extending around a whole tooth, which are sometimes observed as family peculiarities. Such teeth are generally hard and solid; have very little tendency to become carious or wear prematurely, and differ widely from those soft and friable teeth which are due to the arrest of development in early infancy, by either hereditary disposition, or accidentally contracted severe disease, or protracted mal-nutrition.

To Mr. Hutchinson, of London, the profession is indebted for a number of good observations on the influence of hereditary syphilis on the development of the teeth. Although the majority of his remarks relate to the permanent teeth, in which this hereditary malady exhibits itself best, there are some morbid symptoms in the temporary teeth belonging to this class. The temporary teeth, in hereditary syphilis, do not present any peculiarities of form; they are, however, often of bad color, and are very liable to early decay. The central upper incisors are the first to suffer from caries, and often crumble away under its influence, within a year of their being cut. The upper lateral incisors soon follow, but the canines very rarely indeed. The caries generally attacks the neck of the tooth, and rapidly penetrates through it, causing the crown to crumble away, soon after which the fang falls out. Children who have suffered severely from syphilitic stomatitis, are often toothless as regards the whole of the upper incisors, from the second year till the permanent set are cut. Occasionally, the lower incisors suffer in the same way, but far more seldom than the upper ones. The deciduous canines rarely either become carious or drop out. They are, however, liable to a curious kind of circular wearing away, a sort of tusk or peg remaining in the centre of each tooth; the process of circular attrition having commenced a little above the level of the dental neck. This condition Mr. Hutchinson has seen in but five or six cases, and in all these it was symmetrical on both sides, and in both upper and lower sets; he has never yet seen it excepting in syphilitic children. It is not usually produced in any very morbid degree until about the age of six or eight years. He has met with an approach to it in one of the molar teeth of a syphilitic child. The outer layer must, at least, be of a peculiar and abnormal softness to be worn away so singularly.

Original disposition is not an uncommon cause of the enamel being deposited in a thin transparent layer only. The children in whom it occurs, are usually of weak and feeble constitution, and particularly defective as to the development of their osseous system in general. Transparency of teeth according to Rudolph, and bluish white color according to Duval, are symptoms of rachitis; semi-transparency, as of horn, of herpetic predisposition; semi-transparency and milk-white color, of scrofula and tubercles; yellow and white spots, intermingled, with derangement of general development; small, white, yellow, or brown spots, of commencing caries. Yellowish white color, and average hardness, are found in the most durable and solid teeth.

There is one agent, the influence of which appears to be particularly dangerous. I allude to sugar. It has long been considered by physicians and the public as the cause of many cases of caries of the teeth. Its tendency to be transformed into acid is well known. Every acid is liable to disorganize the enamel of the teeth. It is proven by direct experiments that sugar dissolved in water, and exposed to a certain temperature and a continued afflux of atmospheric air, would not disorganize enamel, although this were kept in the solution for many weeks after the transformation of sugar into acid has taken place. There is, however, a difference in the transposition of sugar, according to whether it takes place in a tumbler or on the teeth. The change is more rapid on the teeth than otherwise, from the fact that the air is constantly renewed in the mouth. Thus it is, that the enamel of the anterior

side of a tooth is more often affected first, for the common observation is, that the anterior and lateral surfaces of the teeth are affected, badly developed, cracked, or their enamel entirely absent, while the posterior surface is proportionately uninjured. Slight though the effect may be for some time, it will prove dangerous to the normal condition of the tooth whenever frequent repetitions of the same injury take place. However this may be, this is certain, that there are some writers who deny the injurious effect of the sugar on the teeth, from the fact that the negroes on sugar plantations have the most beautiful and strongest teeth. Perhaps the lime which is usually contained in refined sugar has something to do with the deleterious influence on the dental structure. Such, at least, is the opinion of Hille, who observed both negroes and creoles of Surinam to have beautiful and white teeth, although they are constantly using sugar, but unrefined. The same author, however, adds the remark, that the unrefined sugar also is not prepared without lime, but he is inclined to attribute the health of the teeth to the absence of scrofula in that island. In the Netherlands he found, together with the general prevalence of scrofulous diseases, early decay of teeth. Falck, in his researches on diabetes mellitus, observed caries of the teeth in many instances; he does not attribute this anomaly to the direct influence of sugar, but to its transformation into lactic acid. This transformation takes place readily by the action of saliva, which is generally found to be acid in persons suffering from diabetes.

Fruit, both sour and sweet, are known to destroy the dental structure. Even in adults the same disastrous result is observed. Therefore, in allowing fruit to children, Spielberger's advice is very good, viz. Let the juice be absorbed, or removed from the teeth, by the simultaneous use of either bread or water.

One of the most injurious agents in destroying the teeth is the sudden change of temperature. Of the different layers, enamel, ivory, etc., a sudden change of temperature will affect more the outer than the inner one; the enamel will be liable to crack without being thrown off, as there is an organic connexion between enamel and ivory; but in the cracks acids, or any other injurious substance, will succeed more rapidly in disorganizing the structure.

As malnutrition is among the principal causes affecting the healthy composition of teeth, it is necessary to know the kind of food which is proper for children before and during dentition. Previous to the eruption of the first teeth, infants do not masticate; consequently, as a uniform rule, the food must be such as does not require mastication. Milk and soups are appropriate to this age. Amylaceous substances must be avoided, at least as a general nourishment, for a number of months; with the exception of those cases in which, for professional purposes, you think proper to allow them. Saliva, which is absolutely necessary for their digestion, is secreted in too small quantities in the very first months of life; thus the digestion of arrowroot, and farina, and rice-flour, and all the other amylacea is thrown upon the digestive powers of the stomach, then undeveloped in its muscular structure, and unprepared, from the amount and kind of its secretions, for difficult digestion. If you cannot expect amylaceous matters to be readily digested, even when suspended in water and milk, how much less in a dry form, without the admixture of any liquid, as it is frequently given? Frequently the instinct of the mother is seen to correct, in some manner, the insufficiency of infantile digestion, by first masticating and soaking with her own saliva the bread, or cracker, etc., destined for her infant. This is an aid to infantile digestion, certainly, but it is a singular method of improving on nature's functions.

At the period of the eruption of the first teeth, the child first succeeds in performing the movements of mastication, and about the same time the salivary glands attain a higher development and exhibit a larger amount of secretion. It appears then, as a direct consequence, that amy-

laceous food, in moderate quantity, and well soaked, will prove digestible.

After the molar teeth have made their appearance, in the third and fourth half-years of infantile life, a great change occurs. The salivary glands are developed, the muscles of the infantile stomach strengthened, its digestive powers increased; and about this time more solid food is well borne, and may be allowed. Not only may more solid food be given, but you should order it. Every organ must be exercised according to its development and power, and hence you would not only weaken the stomach by withholding proper stimulus to exertion, but also the consistency and health of the very teeth would be affected; for it is an established fact, that the teeth will more often remain normal with solid and dry than with liquid, soft, and boiled food. Vegetable food, especially, requires protracted mastication and a large amount of saliva. Those animals known by the name of ruminants spend the largest part of their life in mastication. Mastication and saliva have not so much influence upon animal food; carnivorous animals will not masticate their food slowly, but they tear it in pieces and swallow it at once, leaving all the work of digestion to the stomach, and the other digestive organs of the abdominal cavity. Thus, even children without teeth, and without the full development of their salivary glands, will digest animal food, especially extracts, soups, etc., if administered to them. For this very reason, be cautious in directing the nutrition of small children: such as have no teeth, or bad teeth, or toothache, ought to be kept on a very small amount of amylaceous food, if any; whereas animal food, which requires less saliva and less mastication, is better taken and more readily digested. As it is certain that the first years of life will usually decide as to the future condition of the digestive organs, you perceive the necessity of being unusually careful at this period. You will generally find that little attention is paid to the temporary teeth. Parents and physicians do not care much about them, because they are to fall out and be replaced by the permanent teeth. But when you consider that the permanent teeth will not appear before the seventh or eighth year of life, you perceive what injury can and will be done if the milk-teeth are neglected. Their original condition does not generally depend on the attention of the physician, for they are formed during foetal life, and their nature is determined sometimes by hereditary influences. Healthy and robust parents, endowed with good constitutions and normal development of their osseous systems; a mother who has been well during pregnancy, and not suffered from any morbid predisposition; wholesome and appropriate food; a well ventilated residence—these are the conditions which influence the proper development of the teeth of the infant.

Great care should be exercised in feeding. Every adult will remove such remnants of food as are retained in the mouth after meals, by either cleansing the mouth with water, or the tongue, etc. Not so with children. Whatever they have not swallowed will be retained in their mouths adhering to their tongues, cheeks, fauces, or in the folds of the maxillæ; even the food which has been swallowed will be ejected, owing to the extreme readiness of vomiting observed in a large number of infants. These particles of food, farina, arrow-root, milk, etc., are very liable by the influence of the air passing the mouth, or with every respiration, to become sour; and then, by their acidity, to affect the crowns of the teeth. Again, you are aware that mothers and nurses, not among the poorer class of the population only, will, whenever a child is crying, either surfeit it with food, and thereby produce vomiting, or gastric catarrh with a superabundance of acid in the gastric secretion and the contents of the stomach, or what is equally reprehensible, put in its mouth a mass composed of cracker or bread, with water or milk, and sugar. Now, nothing has a greater tendency to become acid than sugar; even in the intestinal canal the transformation of sugar into lactic acid is a common and normal occurrence. It is not strange, then, that under the influence of ever changing

air in respiration, and the renewed afflux of oxygen, the transformation of the sugar into acid should take place very rapidly. You know from what has been said that the crowns of the teeth are very easily influenced, and destroyed by any slight acid brought into contact with them, even by fruit of any description; you will, therefore, not be surprised to find that the teeth will be severely affected by the transformation of the sugar contained in these filthy compounds. Children of from two to three years of age, come under your observation daily in whom this bad custom, and nothing else, has been the cause of the decay of the milk-teeth; thus giving rise to disturbances of the general health, and toothache in early life. To discontinue their use, is absolutely necessary before the eruption of the first incisors, as it will be very difficult to do so afterwards. The reason of this is well explained by Spielberger, who emphatically denounces the bad practice alluded to. After the enamel is removed from the crown of the tooth, from the constant effect of the reproduced acid, and the exposed situation of the crown, the access of cold air, and the contact with other warm or cold beverages will produce intense pain. Even the sucking-bag itself will give rise to pain by becoming cold, and the child will cry until a new and warm one is supplied by the nurse, whose pity is excelled by nothing but her ignorance. She will remove the cold one, and dip it into a warm solution of sugar, or keep it in her own mouth, and again put it into the infant's mouth, and the child will now keep quiet, sucking, and sleeping, and it will also allow the nurse to sleep. You will meet with infants sometimes, who are perfectly incapable of sleeping without this substance between their lips, from the mere fact that the enamel of their teeth is removed, and the ivory half gone, and the infant feels pain from having no protection against the cooling influence of the air. Thus the teeth are destroyed until the pulp, too, is affected, when the child will feel no longer any pain. It has no pain, and no teeth. A tooth will sometimes be eaten away in this manner before the crown is fully developed. You will meet with a large number of children, who, from one or more of the reasons alluded to, have no healthy incisors, or perhaps, no incisors at all, from their second or third year, up to their seventh or eighth.

As the incisor teeth have no other office but to rend or cut the food, digestion itself will sometimes not suffer much, provided the child masticates well otherwise, mixes the food with a sufficient quantity of saliva, and has a perfect and undisturbed gastric and intestinal digestion, *on the condition* that the knife, before the food is brought over the lips, does the work of the incisor teeth, as much as artificial means can do. But a serious consequence, alluded to by a number of physiologists and lately by the above-mentioned author, must not be overlooked. You know that a number of letters, as D, T, and even S, C, St, etc., are formed by the tongue approaching the top of the incisors. But what if they are absent? The child will try to pronounce as well as circumstances will permit; thus those consonants are formed by the tongue touching the alveolar margin of the jaw-bone, and pronunciation becomes unclear, thick, and lisping. This misfortune is not at all mended by the temporary teeth being replaced by the permanent ones, about the age of seven or eight years; for the child has been accustomed to bring forward its tongue in pronouncing the consonants D, T, S, C, etc., to the alveolar process, and scarcely ever will this custom be replaced by the better one of again accustoming the tongue to touch the top of the incisor teeth. No muscles are more obstinate, when once used to one particular action and motion, than those of the tongue. This is seen in the attempt to pronounce a foreign language. There are few men who are able to pronounce certain words of a foreign language as well as those of their vernacular; and it is a fact, that, from mere physical reasons, a young person will learn the pronunciation of a foreign language more easily than adults, whose lingual muscles have been active for decennia in the same manner and direction, and with the same exertion. Thus there are,

therefore, reasons for carefully preserving the milk teeth in young children, other than merely for the sake of beauty, or digestion, or comfort. If they are destroyed, if toothache is produced, or other inconveniences result, you will naturally think of extraction of such tooth. In my second lecture I alluded to the fact, that after the extraction of a tooth, the jaw-bone becomes atrophied, the alveolar margins narrower, thinner, and lower, and that in the extraction of a temporary tooth this danger is greatest; for at a later period of life, the permanent one will not meet with sufficient space. Moreover, the molar teeth, at the age of four or five years, have long and deep roots, whereby extraction is rendered very painful. It must be borne in mind, also, that the pulp of the permanent tooth is, about this time, imbedded between the roots of the temporary one, and you may, by forcibly extracting the one, deprive the child of the other at the same time. Again, a hard cicatrix will be formed by extraction, and the permanent tooth may cut through it with difficulty. The child has also suffered a severe loss, being deprived of one of its instruments for mastication. If you can preserve the tooth it is your duty to do so, while in cases of carious molar teeth in children, it is better to have them filled than extracted. My remarks refer to the normal condition of the teeth and gums. But the tooth must be removed in cases of dental caries, where an inflammation of the inner alveolar membrane, and sometimes suppuration, takes place—a morbid process, which is, in a number of cases, complicated with swelling of the submaxillary glands. These tumors are commonly considered scrofulous, but when they are the only symptoms of scrofula which you can detect in a child, never forget to examine the state of the jaw and the teeth, and search carefully for a deep-seated, painful inflammation and suppuration around the root of a tooth.

Original Communications.

HYGIENE OF THE SEWING MACHINE.

(READ BEFORE THE ACADEMY OF MEDICINE, NOV. 21, 1860.)

By A. K. GARDNER, M.D.,

PROFESSOR OF CLINICAL MIDWIFERY AND DISEASES OF FEMALES, IN THE NEW YORK MEDICAL COLLEGE.

(Concluded from page 421.)

Seligman & Co. employ ninety-four of Singer's machines in making clothing. Some of the girls who had worked these heavy machines on thick beaver cloth and other heavy clothing for some years, had found, as a general thing, that the girls in the shop were as healthy as ordinary. True, when working on heavy goods for ten hours, they did feel fatigued, but they never suffered from any special diseases, never had heard of any spinal difficulties, neuralgia, amenorrhoea, or leucorrhoea. That there were seldom more than two or three of their number absent during a day, out of their whole number, for any and all causes. This was the unanimous testimony of many of those working the machines in answer to my special and direct inquiries.

Davies & Co., extensive shirt and clothing manufacturers, work between three and four hundred Wheeler and Wilson's machines, and never heard from any of their employees the least suspicion of the working of machines being other than perfectly healthy employment. At their immense factory in New Haven (visited by the members of the American Medical Association, last spring, by invitation), where nearly four hundred Wheeler and Wilson's machines are used, the same result is found upon the health of the workers.

Finding, therefore, no proof that physical disease originates, or is aggravated even, by the use of the sewing machine, I am forced to believe that in the moderate use of the muscles of the lower extremities, the analogy holds

good in this as in any other form of labor, that use strengthens the organs—that while the use of half of the body is not so beneficial for health, or for an equal development of the entire body, as if the sewing-machine exercised the whole frame, that it is far better than no exercise at all, as is the lot of the confined hand-sewers.

Again: It has been reported that the assiduous working of the sewing machine, where the work was fine, and great care was requisite for regularity and evenness, injured the organs of vision in some undescribed manner. Not trusting to my own narrow experience, or the reports of the various operators or employees, as I could gain access to the various eye infirmaries, I accordingly addressed similar letters to most of the eminent practitioners in the United States, where machines are usually employed. My inquiries were: Whether amaurosis was caused by sewing-machine work, and if so, was it as frequently thus caused as by hand-sewing? Whether, when existing, it was aggravated by the use of the sewing-machines? Was acute or chronic inflammation of the lids or globe known to be caused by lint springing from sewing machines? Was the sewing machine an injury or a benefit to vision, and particularly when the amount of work done by them is considered?

Two letters will answer as a type of the replies I received:—

Massachusetts Charitable Eye and Ear Infirmary.
Boston, May 31, 1860.

DEAR SIR:—As one of the Surgeons of the Infirmary I can answer your inquiries in a few words.

1. I have seen no injurious effects on the lids or globe of the eye from the lint of sewing-machines.
2. I occasionally see cases of what is called marked sensibility of the retina, either produced or aggravated by their use.
3. I think the use of sewing machines, on similar work for a similar period, a decidedly *less* exposure for the eye than the common use of the needle.

Yours, very truly,
DR. A. K. GARDNER. GEORGE A. BETHUNE.

A. K. GARDNER, M.D.

DEAR SIR:—It would afford me great pleasure to communicate to you facts and statistics relative to the hygienic effects of the sewing machine on the eyes, did I possess any of value on the subject. Very few of my patients work themselves the machine, and I have rarely heard any complaints of its ill effects.

Yours, respectfully,
ISAAC HAYS.

Philadelphia, June 3, 1860.

Considering the immense number of machines now in use, it would seem impossible for the eye to be seriously affected by them, without the oculists of the United States having noted it in numerous instances; yet the opinions expressed by gentlemen of large experience are corroborated by many others, verbally made to me; among them, Drs. Wilkes, J. H. Clark, Ceccarini, and Stephenson, men of reliability and very extensive experience in this city, and Dr. Clark being the only oculist of eminence in the great manufacturing city of Newark, where the machines are very numerous, and engaged in every kind of work, from shirts, clothing, and shoe-binding, up to leather, harness, and saddlers' work. Dr. Clark has also made special inquiries at the various factories, and reports that he can trace no disease of any description to the use of the sewing machine. Dr. Stephenson, who has the charge of the Ophthalmic hospital, having a large number of patients among the classes engaged in laborious occupations, and also an extended private practice, says to me, that he has never seen the first case of injury to vision traceable to the sewing machine.

The conclusion that I have come to, after six months'

deliberate investigation of this subject is, that the *sewing-machine is a blessing to mankind, and especially to the female, and that without an appreciable drawback.*

We have thus considered the sewing machine as a healthy substitute for the degrading, exhausting, debilitating—may we not say demoralizing—needle, with its everlasting "stitch, stitch, stitch," and its accompaniments of poverty, misery, and vice. We might here leave it to the consideration of those in whose charge is the prevention of pauperism, the reformation of the Magdalen, the support of the widow, and the care of the orphan, and ask their attention to it as a *reforming agent*. This we hear has already been done in some places; and some States, among them Massachusetts, ever foremost in works of education and philanthropy, has by legislative enactment exempted the sewing machine from attachment and sale for debt. We ourselves have to look at it in one additional aspect, viz. as a prophylactic, as a preventive of disease, as an agent antagonistic to the tendency of the times, the sedentary, inactive, enervated, un-muscular habits of the women of the world.

We need not recall to mind the law of animal tissue, that it is developed by use. Physiologists tell us that the brain increases by use, and that it is exercise alone which makes the distinction in its size in families and races. The lungs of the runner, the player on wind instruments, etc., are thus developed. The womb and breasts of the woman of any age who has had children, are larger than those organs of another of corresponding age who has been childless. The development of the blacksmith's arm is too well known to be mentioned.

What is denominated "tone" and "tonicity" by modern writers—phrases equivalent to vigor—is the normal condition of organs strengthened and developed by normal exercise. Action is invigorating, inaction enfeebling. This fact is too much neglected by the physician, and in consequence upon this platform of a partially applicable truth we have an "*ism*," founded, the "movement cure." We may perhaps beneficially examine and appropriate the truth it possesses in respect to the subject of our investigation.

A body in vigorous health is less liable to be seized with, or prostrated by, disease than a body in an atonic condition. If this is true of the whole frame, it is true of a portion of it, or of a single organ. The sewing machine overworks, that is wearies and fatigues the learner, who exerts a muscular force, and for a too prolonged period, sufficient to drive half a dozen machines. The same instrument is but a healthy stimulant to the muscles of the lower extremities, of those accustomed to its use, developing and strengthening them. But the benefit and increased volume of the muscles actually employed is extended to the adjacent parts of the frame, and the muscles which belong to the pelvis, the back, and which support the abdominal walls, are called upon to aid in the work by steadying the frame, and firmly holding the parts to which the muscles of the lower extremity are attached. The development of these muscles affects all the adjacent organs. The circulations are carried on more regularly, the absorbents are brought to work more energetically, and there is a tonicity very perceptible throughout the abdominal parietes, which is a result of the employment of the neighboring organs. In the female we have as a direct result, a "tone" in the generative apparatus before unknown, and a direct result of normal activity. The flaccidity of the vaginal walls is supplanted by contractility; the relaxed ligaments of the uterus become tense; the perineal muscles are developed; prolapsus uteri is impossible; leucorrhœas are absent, because dependent upon debility, malposition, and displacements; the secretions are normal, because the parts are in a normal condition. Now this is not theoretical, or at least is only the theory for the explanation of absolute facts which have come under the observation of myself, or of those who were well capable to judge, and who have communicated them to me. They may perhaps be called "coincidences," but the pustules upon the skin are also

coincidences which, with others, make up what we denominate small-pox; and the coincidences which I shall proceed to relate may be found to be as marked and persistent as the variola cicatrices.

A case has been reported to me by a member of the Academy, of aggravated uterine disease, accompanied by prolapsus and leucorrhœa, which was of many years' standing, and which had resisted all treatment, including pessaries and other local applications, which was cured entirely and solely by the result of systematic and vigorous muscular exercise, united with healthy diet and stimulating mountain air. Such cases are not infrequent. Passive motion in a part produces a circulation of the stagnated blood, in its enlarged, congested vessels, and in their diseased condition is perhaps all the stimulus that they can bear. Active exercise or motion is only compatible with a comparatively healthy condition of these organs.

We will not seek to develop this view, but be content with its simple suggestion. But while the trundle-hoop, dumb-bells, and gymnastics generally, which have no result other than increased vigor of body, are recommended as prophylactics and invigorators, either partial or general, the exercise required in working a sewing machine should not be disregarded, especially as in addition to increased health, the pecuniary returns are worthy of consideration.

CASE OF HYDROPHOBIA.

BY WM. BRODIE, M.D.,

OF DETROIT, MICH.

On the 26th of September last, a young man by the name of Patrick O'Donnel, came into my office for professional advice. He stated that he had had a cough for some time, but did not think much about it until that morning, when he felt a difficulty in breathing, and thinking that he must be consumptive, asked me to "sound his chest." He informed me that he was a moulder by trade, and inhaled daily a large amount of dust. I found his throat reddened and somewhat swollen, his respiration and pulse both normal. Yet there was an anxiety in his countenance. I told him the dust was most probably the cause of his cough, and would therefore give him an expectorant, which would relieve him; but he would not be satisfied unless I examined his lungs, which I did, but found nothing abnormal save a slight bronchial rûle. He took my prescription, consisting of quinine and Dover's powder, and went home. On the morning of the 27th his sister called upon me, and requested my early attendance, as Patrick had a severe pain in his side. I called upon him after my breakfast, and found him in the same condition as before, with the exception of a severe pain in his right side below and behind the nipple. On examination of his chest again I could find no evidence of disease, and in order to do *something to allay his mind*, I ordered a blister, and continued the prescription. In the afternoon I was requested to call again, "as he had difficulty in swallowing." I did so, and found him as represented. I had some tea brought in order to ascertain the extent of his trouble, as I thought he must be exceedingly nervous, or was possibly laboring under some superstitious excitement. Upon presenting the fluid he seized upon it with avidity, and gulped it down in mouthfuls, as though he had an attack of "quinsy sore throat," yet at the same time different—his look was excited, and his movements were rapid and singular; he had no pain save that arising from the blister, and to which I attributed his condition. I gave him a potion of morphia, and left another to be given him during the night.

Shortly after midnight I was again called, when I found an exaggeration of the previous symptoms. The appearance of fluid brought on the paroxysm of apparent strangulation. I then asked him if he had been bitten at any time

by a dog, when he suddenly turned to me, saying, "You don't think I have the hydrophobia?" I answered, "I cannot now account for your symptoms short of that supposition." "Yes," he said, "I was bitten by a sick dog the last week in June, but a doctor told me the dog was not mad, and he cured the bite, which took him nearly two weeks." A felon then came on his thumb, which was sore for three weeks more. I was thus satisfied of the nature of the disease, and took measures accordingly. In the morning I requested Drs. Pitcher, and Stebbins, sen. and jr., to see him, who pronounced it pure hydrophobia. The sight of water in the room, the sound of water pouring from one vessel to another, the motion of the air from opening and closing a door, or the hand before the face, would throw him into a violent paroxysm, which would last from three to ten minutes, when he would be utterly exhausted. The only way he could take any medicine was by putting it dry on a piece of paper, when he would dash at it and throw it in his mouth suddenly. He had no febrile symptoms, his skin being moist, and perspiring during the whole time. His mental powers were clear and perfect to the time of his death.

The plan of treatment was by opiates. Chloroform was suggested to my mind, but I feared its results, as an after circumstance fully proved. During my absence an officious practitioner went to see him, and without any judgment as to the results, commenced to put him under its influence, and with little success was engaged in the act when I returned. I found my patient completely exhausted, and begging to be released from the stupor that was impending. His pulse had become small and frequent, his skin was cold and clammy, and he complained of his feet becoming cold. I endeavored to bring about reaction by hot applications, but without benefit. It was now evident that he could live but a short time. His respiration seemed to convulse the entire muscular system. Liquids ceased to excite the usual paroxysm, and he began to swallow, with difficulty at first, but as exhaustion progressed, with greater ease, so that before he expired he swallowed fluids with the same ease as in health. He died at five o'clock p.m., less than thirty-six hours from the first indication of his disease. The case was one of great interest to the community, and much to the discomfort of the patient, everybody wanted to see him, and would see him, both professional and layman. Everybody had a cure, and did not hesitate in my absence not only to urge the friends to administer, but even do themselves so. Two physicians, ignoring all professional ethics, taking advantage of my absence, declared the case one of delirium tremens, and administered remedies for the same. I cannot, therefore, let the opportunity pass by, of calling the attention of medical educators to many of their graduates, who, although able to pass an examination, have not the first qualification to associate with gentlemen, whose principles will violate all courtesy, whose ignorance prevents them from either reading or comprehending the common rudiments of the English language, and whose prescriptions are a burlesque. It is high time a united effort were made to place our profession where it *has stood* in the past, and *ought* to stand in the present.

THE PESSARY A HURTFUL REMEDIAL AGENT.

By WM. MASON TURNER, M.D.,

PETERSBURG, VA.

I HAVE been much interested in reading in the TIMES the discussion which has occurred of late in the New York Academy of Medicine between Drs. Peaslee, Gardner, Sims, and Thomas. The perusal of that report was all the more pleasing to me from the fact that for the last twelve months I have given considerable attention and practice to the subject in hand, and desired much to read, or learn by some means, the opinions held by others concerning the use of the pessary. I am well acquainted with the views

entertained of that instrument by some of the most renowned obstetricians in the world—*e. g.*—Drs. Hodge, Meigs, Velpeau, Dubois, Nonat, Churchill, and others; yet I wished to see what others, from *practical experience*, thought of those vaginal agents called pessaries. My own conclusions have been based simply and entirely on results obtained in practice, and the conclusions which I have formed have been arrived at only after giving both sides—the *advantageous*, and the *non-advantageous* opinions—a fair trial. My experience, of course, does not rank with that of Dr. Hodge, and others, and on that account, perhaps, what I may write does not and should not carry much weight with it—simply from insufficiency of experience. Yet the results for one year, as I have before stated, are very decided and conclusive to my own mind—so much so that my mode of treatment in cases where pessaries have been advised and used is fixed.

My experience bears out, *in toto*, the arguments advanced and positions held by Dr. Gardner. I was indeed pleased to find a member of the New York Academy entertaining precisely my views; and if the results of the cases I submit tend to strengthen his points, I most gladly lay them honestly before the profession. Let it be understood here, however, that I do not take *extreme* grounds against the employment of the pessary; neither does Dr. Gardner. *There are some cases in which the pessary of right construction, of proper size and adaptation to the parts, is of decided and lasting advantage. Only in one instance, however, can I conceive this to be possible. In other words, I think the harm resulting from the use of the pessary and the risk of harm in all cases, generally overbalance the accruing benefit, save in the case excepted; that case is a complete prolapsus where the ligaments have so far lost their function as to allow the womb to protrude through the genital fissure. Another instance, perhaps, is where the vagina is perfectly relaxed and affords no support at all to the uterus; but this condition of that canal is almost always present in complete prolapsion. When this exists, I think the pessary, well applied, is useful. But I think it is merely swapping one inflammation for another—that is vaginitis, the effect of the pessary, for metritis occasioned by the cramped and unnatural opposition of the womb, in prolapsus. It may be objected here that metritis *always* exists, more or less, in such cases—and why not always exchange it for the vaginitis? I reply, it cannot be determined that metritis exists in all the cases where pessaries have been employed. In some, it doubtless had been present, yet in the greater part of those cases I humbly think the metritis should have been, and *could have been* better treated, by other and less hazardous means. It is needless for me to enumerate the many pretended advantages of the pessary, as claimed by its advocates; it is quite as needless to enumerate the multitudinous woes which we *know* are oftener than otherwise consequent on the use of the instrument. The cases mentioned by Drs. Sims and Thomas are exceptional cases—cases which I do not deny occasionally occur. But look at the *vast amount* of harm done, while these *few cases* are *bettered* by the pessary; or to say the least, how many unfortunate females there are left uncured or whose condition is not bettered—to a *very few* who are cured! Admitting that pessaries were always well placed—that they fitted exactly the vaginal canal, yet the pressure exerted on them and through them on the vagina (none deny pressure in the premises, for by it we see the beneficial action of the instrument) will and does most frequently occasion local and then general sympathetic inflammation of the uterus. This effect cannot be disputed, and if for none other reason, in my opinion, the pessary as a remedial agent should be condemned. My objections to the pessary are chiefly, to wit:—(1) They make pressure on the vagina (the discoid, common glass, olive wood, and globe pessary, particularly) and occasion consequent inflammation and ulceration—very often resulting in recto- and vesico-vaginal fistulas. (2) It is unsound curative practice to treat effect instead of cause; in other words, it is far better to give tone to the*

ligaments of the uterus and to the vagina, the natural supporters of the womb. (3) The inconvenience arising from adjusting the pessary, getting the particular size, removing the instrument for cleansing purposes, and the disgust which is often awakened, justly or not, in the mind of the delicate and refined woman. I might multiply objections, but it is useless.

I hope it will be seen that thus far I condemn the use of the pessary as a remedial agent, applicable in the majority of cases—but admit its value in one exceptional case, *i. e.* in complete prolapsus and where there is total relaxation of the vagina. And even such a case can be much benefited, under certain circumstances, without the use of any pessary. I have now in recollection a case in my own practice, where the woman is well enough at present to walk about and do a moderate amount of washing. She wears a suspensory bandage, fitting the abdomen snugly;—she takes tonics and syringes the vagina with a strong decoction of red oak bark; but the main prime treatment was *absolute, continued rest* in a horizontal position, with the pelvic region slightly raised. Three months and a half ago, when I took her under my treatment, that woman had been bed-ridden for fourteen months. I would beg leave to state here that I have often found the following pessary (if it be proper to call it such) to act well. I have used it frequently, and have always been pleased to note its good offices. It is simply a good piece of surgeon's sponge well beaten and freed of sand. This sponge should be cut into a cylindrical form about four inches in length. Saturate this well in a strong decoction of red oak bark (I prefer this to all local astringents), and place it into the vagina by means of a speculum—the speculum being gradually withdrawn, leaving the sponge behind. This acts as a pessary in a measure—but it claims this advantage over pessaries generally—it *does not act on any one particular point of the vagina*—its pressure is equable, therefore, apart from its yielding nature, it could not set up local inflammation. Besides, it is a most convenient and effectual mode of applying astringents and thus toning up the vagina. The patient can far more readily learn to introduce this than she can the ordinary pessary—discoid, flat, horse-shoe, ring, or stem. The sponge should be removed every day and hot water poured through it; this fits the sponge for use again.

This brings me to my treatment for malpositions of the womb—prolapsus, simple and complete—ante-version, and retroversion. Said treatment can be summed up in a few words; its grand features as regards all misplacements, *speaking generally*, are *tonics, rest, astringent injections*, including the *sponge*, and a *proper suspensory bandage*. If the womb be anteverted, retroverted, or prolapsed, I reposit it, enjoin and *enforce* strict rest in a horizontal position, exhibit tinct. ferri muriat., keep open primæ viæ, inject into the vagina astringent lotions, or use (most commonly) the saturated sponge pessary. When the system is toned up generally, and the uterine ligaments, having had a chance to recruit, have somewhat recovered, I make the patient wear a suspensory bandage. I generally use one which any housewife can readily manufacture from any kind of cloth, it matters not what—calico, muslin, etc. It is shaped like an equilateral triangle, two sides of the triangle being curved to fit the abdomen; to the angles tapes are attached.

This is substantially my treatment. At the same time I always suggest, when my patient is walking about, that the hoop-skirt should be made to go over the shoulder with a strap, so that the superincumbent mass of clothing may not drag around the waist.

My opinion in regard to the *non-employment* of pessaries and to the treatment for malpositions of the womb is derived from the following statistics of practice:—

Since November, 1859, I have treated in all, with particular reference to the point in question, nine cases of displacement of the womb; for six of these cases (anteversion and prolapsion generally), I directed tonics—(chiefly the tinct. ferri muriat.)—the suspensory bandage as given above

—the vaginal sponge saturated with the bark decoction, and absolute rest, long persevered in. In three cases, I employed as supports for the womb (cases of prolapsion generally), the discoid, ring, globe, and horse-shoe pessary. To-day my *six* patients, not treated with pessary, are walking about—express themselves as “pretty well”—well enough, in fact, to attend to household affairs, and are under no treatment, save in the use of occasional vaginal astringent injections, and of the abdominal suspensory. What I claim for the suspensory is—that it supports the viscera of the belly—that it acts as the relaxed muscles of the abdomen *should* act—that by so acting, with the other viscera, it in a measure and indirectly supports the womb also—said womb being repositied, reduced, and kept in place partially by restored system and a vagina made tonic by astringent injections. Dr. Peaselee's comparison of the *extra barrel-hoop* to the abdominal suspensory is, in my opinion, by no means apposite. The walls (or *slaves*) of the barrel are not *relaxed*—they bear no resemblance to the flaccid muscles of a relaxed abdomen. If he had used instead an *extra rope* to a *bale of cotton*, the comparison would have been more apt in one sense, but so far from being true, would have proved the converse of his proposition. The three *unfortunate* females (as I take it), in whose cases I used the pessary, were complaining a month ago as heavily as eight months ago. In two of them ulceration of the neck of the uterus and of the contiguous parts of the vagina supervened, although I endeavored my utmost to get the pessary of the right shape, size, etc. In the other woman, leucorrhoea was well established. They are now under different treatment—I have discarded the pessary—put my patients to bed—given them tinct. ferri muriat, and all three are thriving.

Reports of Hospitals.

BROOKLYN MEDICAL AND SURGICAL INSTITUTE.

SURGICAL CLINIC OF PROF. LOUIS BAUER.

[Reported by ALFRED WEILLER, House-Surgeon.]

SUBACUTE inflammation of the tibio-tarsal joint often gives rise to contraction of muscles, and thereby to malposition and deformity of the foot. The peronei muscles are those chiefly involved, and therefore the deformity that ensues is talipes valgus. Dr. Bauer holds that this is the rule in all affected ankle-joints still retaining their mobility, whereas in ankylosed ankle-joints the deformities produced may be very different. Again, he says, that the contraction of other muscles than the peronei are more of a consecutive nature, being produced by the deformity instead of its active agent. During the last few months three cases bearing upon these facts were presented and successfully treated at the Institute.

CASE III.—*Subacute synovitis of the ankle-joint—Contraction of the peronei muscles producing talipes valgus—Subcutaneous division—Recovery.*—Wilhelm Gouze, set. 16, a saddler's apprentice, entered the Institute on the 25th of July. His right foot presented that deformity known by the term of talipes valgus, viz. his foot was longitudinally rotated to such a degree that he stepped almost upon the inner margin; the scaphoid bone protruded, and the arch of the planta pedis was greatly diminished. The attempt to return the foot into its proper position, not only failed but caused considerable pain in the ankle joint, and the peronei muscles became thereby exceedingly tense. Tenderness was also noticed in the joint both on pressure and gentle motion. In addition the patient stated that locomotion was very painful to him, that in the morning he felt comparatively easy, but towards night he was often

entirely unable to walk. The deformity had existed about six months; had been preceded by pain in the ankle-joint, brought on by excessive exertion. The case was pronounced to be essentially subacute inflammation of the tibio-tarsal articulation, followed by contraction of the peronei muscles, which had led to the abnormal form and position of the foot. The subcutaneous division of the contracted muscles was performed, whereupon the foot could be immediately returned into its proper position. To secure rest and immobility to the articulation, a leather splint was affixed to the front of leg and foot. In about a week the soreness about the joint had subsided, and the patient could adduct and rotate the foot at pleasure without any inconvenience whatever. An apparatus was then applied to restrain the rotatory movement of the foot, and a firm leather pad fastened to the sole inside of the boot for the purpose of re-establishing the arch. The patient left after a treatment of two weeks, and has since steadily improved. At present the foot has a good form, and the planta pedis is already moderately arched, whilst the scaphoid bone occupies its normal position.

CASE IV.—*Subacute inflammation of the tibio-tarsal joint—Articular effusion—Contraction of peronei muscles—Talipes valgus—Tenotomy—Puncture of the joint—Recovery.*—Serina Dickson, set. 6, of healthy parentage and good constitution. Some two years ago she sprained her ankle, when inflammation and deformity of the foot gradually ensued. When admitted into the institute, the foot presented the following appearance: Everted and rotated, plantar arch flattened so that every point of sole touched the floor, the scaphoid bone protruded so as to give the foot the appearance of tarsal inflexion, dorsum pedis flattened; ankle-joint every way tender and moderately distended by effused material; peronei muscles contracted, resisting inward rotation.

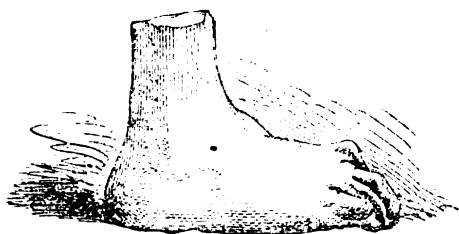
In his clinical remarks Dr. Bauer stated that the case under consideration bore the same pathological stamp as that of Gouze; that he looked upon the traumatic inflammation of the ankle-joint as the starting point, which had given rise to muscular contraction, and consequently to malposition and deformity of the foot. The peronei muscles being those implicated, talipes valgus had been the inevitable result. The present case differed, however, from the former by the effusion, and hence the treatment should be so modified as to meet that complication.

He, therefore, subcutaneously punctured the distended capsule, removed its contents, divided the contracted muscles, applied tightly fitting adhesive straps, and secured the rest and immobility of the joint in the manner previously described. In a few weeks, when the inflammation had entirely subsided, and the free mobility of the joint was restored, he followed up the treatment with an appropriate brace and a plantar pad, which in two months improved the form of the foot considerably. When discharged the patient still presented the attenuation of the leg, the ordinary accompaniment of muscular contraction.

CASE V.—*Partial posterior dislocation of the foot—Contraction of all the flexors of the foot, and four large toes, and of the extensor digiti minimi proprius—Talipes valgus—Recovery.*—The case in question, referring to Lewis W. Leaman, is unique in appearance, and its pathological character is surrounded by more than ordinary difficulties. The whole extremity, although otherwise useful to locomotion, is generally attenuated and slightly shortened, and this circumstance has led to the erroneous diagnosis of paralysis. But when carefully examined the difficulty assumed a very different aspect. The adjoining diagrams of the cast taken illustrate but imperfectly the actual condition of the foot, yet they will give some idea of the shape and relations of the parts concerned.

In the first place, it will be noticed that the foot stands in a flexed position (extension being impossible); secondly, that the distance between the heel of the malleoli is increased by at least three quarters of an inch; thirdly, that the projecting scaphoid bone is placed immediately below,

and anterior to the internal malleolus; and, finally, that the malleoli encroach upon the foot downward. These anatomical conditions denote posterior dislocation of the foot.



At the place where the scaphoid bone projects in and downward, the planta of the foot is greatly widened, thereby contrasting strongly with the metatarsum, which is not only atrophied, but also laterally compressed. Any attempt at extending the foot, or the four first toes, is strongly resisted by the contracted flexors. The contraction of the flexor muscles of the large toe is particularly marked, as they draw the latter towards the planta, and from off the capitulum of the first metatarsal bone, which projects superiorly. Dr. Bauer favored the opinion that all the muscular contractions were rather attributable to displacement and pressure, than to previous inflammation and reflex action. The case seemed to be of long standing, for all the anatomical changes were far advanced and firmly established, which fact, together with the history of the case, seemed to bear out that supposition. It was ascertained that when about two years old the patient had met with an accident, his nurse having allowed him to fall upon the stairs in such a manner that his heel was pushed foremost between two narrow uprights of the bannister, and his foot was strongly flexed. In consequence of the immediate tumefaction and painfulness of the parts the dislocation was overlooked, and in fact it never has been recognised before. The idea imparted by professional men that the extremity was paralysed deterred his parents from seeking further aid.

As to treatment, Dr. Bauer remarked, that he had no doubt of being enabled to permanently lessen the deformity by dividing all the contracted muscles. This alone would render the foot more useful. But he was unable to decide, whether the reduction of the dislocation of the foot and large toe would be successful at all, or if so, whether the reduction would be permanent; and, again, whether the attempt would not entail the necessity of dividing the *achilles tendon*. All this could be decided only during the progress of the operation, which was proceeded with as follows:—When the patient was under the full effects of chloroform, the contracted flexors of the toes were first divided, then the adductor and extensor tendons of the small toe; and, lastly, those of the *tibialis anticus*, *peronæus longus*, and *brevia*. This done, and the respective wounds being carefully closed by adhesive plaster, the foot was forcibly extended to its utmost capacity, and likewise drawn forwards—this proceeding meeting with no resistance. But when the foot was again flexed it returned to its old posi-

tion, as did also the large toe. In order to prevent such recurrence, Dr. Bauer, by means of a leather splint, kept the foot and the large toe in the most extended position, sufficiently long to accustom the parts to their new relations. After the lapse of four weeks passive motion of the joints was commenced, and the patient allowed to walk, his ankles being well protected by a brace, and his planta raised by a leather pad. When, about three months after the operation, the patient was examined, the improvement was most conspicuous, and nothing seemed to interfere with the steady process of reformation. The leather pad, to which I have repeatedly referred as the means of raising the plantar arch, is made as follows:—As many pieces of soft sole leather or buckskin are glued upon each other as is necessary to procure the proper height, this is then cut according to the form and extent of the plantar arch to be established, and then fastened in a proper manner at the appropriate place inside of the shoe. Dr. Bauer generally commences with four layers to his pad, and increases the height as the treatment progresses.

UNIVERSITY MEDICAL COLLEGE.

PROF. VAN BUREN'S CLINIC.

Dec. 12, 1890.

FRACTURE OF THE LOWER END OF RADIUS TREATED BY SHRADY'S SPLINT. SILVER FORK FRACTURE OF FIVE WEEKS' STANDING; REFRACTURE.

CASE VI. returned (see p. 362). "*Silver Fork Fracture treated by Shradys Splint*.—The patient, P. K., aged 35, first presented himself about six weeks ago with well marked deformity, the result of fracture of the lower end of the radius. You remember that I then described to you this splint and its mode of application. It is well enough to speak of the advantages of one form of splint as compared with another, but the best evidence of its utility is the result as here shown. If you can cure a case of this sort without deformity you obtain a result which is an exception to the rule. You will recollect that the deformity was well marked in this case; but now, after the splint has been removed, you can with difficulty distinguish any deformity whatever. The wrist-joint is free, and there is very slight stiffness. This is what I call an exceedingly good result.

CASE VII.—*Silver Fork Fracture of five weeks' standing; refracture*.—A. B., a young married woman, æt. 30. This patient, about five weeks ago, fell down a flight of stairs, and placing her hands out to save herself fractured the lower extremity of the right radius, and jammed it into the epiphysis, breaking it in several fragments, as is the rule in such cases. You will notice here the peculiar deformity which entitles it to the appellation of the silver fork fracture; the prominence of the lower end of the shaft on its dorsal aspect, and also the prominence upon the palmar surface a little further up the forearm. The hand is also carried to the radial side. It was to remedy this that Dupuytren devised his splint. The patient has been unable to use the hand since the accident, and being anxious that something should be attempted to relieve her I propose, after she is anesthetized by ether, to break up the union and strive to bring the fractured portions more nearly in apposition. Dr. Gouley will then put up the fracture before you in the short splints. In this instance we shall probably have to keep the splints longer applied than in a recent case, and consequently there will be less risk of ankylosis, and for this reason only we prefer them. I proceed in trying to break up this fracture very much as I would in reducing one which was recent. I make firm traction upon the hand and thus separate the fragments from each other, at the same time I flex it forcibly. The position of flexion is that which characterizes the splint of Dr. Shradys, which you saw produced such an excellent result in the other case. Besides traction and flexion in reducing the fragments in position, I make pressure upon the two prominent points. By removing my fingers I can

re-produce the deformity. This business of refracture, in order to produce better results, is done much more commonly than formerly. In old times, when the use of ether was unknown, the severity of the operation was such that it was rarely submitted to; now, however, it is of much more frequent occurrence, for obvious reasons. There is one point in the treatment of fractures near the joint that you must not lose sight of, viz. the integrity of the joint itself. The apparatus must be of such a character and so applied that the joint will not be kept immovable longer than is absolutely necessary. Dr. Warren was in the habit of recommending the use of no apparatus whatever in such cases, as his experience had taught him that non-union was less liable to occur than impairment or loss of function in the joint. His rule was, especially in fractures at the elbow joint, to place the limb in a sling, and when pain and swelling had disappeared to commence passive motion. In refracture the violence offered to the parts, which to you seems to be very great, is very rarely if ever followed by serious inflammation. It is the knowledge of this fact that makes the operator less careful in his movements than he otherwise would be. I am satisfied, moreover, that there is less danger of inflammatory reaction after an operation when an anæsthetic has been employed than when the patient is sensitive to pain. (The two short splints were then applied to the limb by Dr. Gouley; a pad being placed over each extremity of the fragments.) This apparatus leaves the wrist free. We do not expect to get a perfect result in this case, our main object being to leave her with the good use of her wrist that she may attend to her work

COLLEGE OF PHYSICIANS AND SURGEONS.

PROF. PARKER AND MARKOE'S CLINIC.

December 10, 1900.

TUMOUR OF THE TONGUE.

Dr. PARKER.

CASE XVI. Tumor of the Tongue.—A. B., æt. 30, a laboring man, six or seven years ago had a chancre, which was treated in the ordinary way. Since then he had suffered with nocturnal pains, nodes upon the tibia, and other ordinary manifestations of constitutional syphilis. About eighteen months ago a small white pimple-like induration appeared in the centre of his tongue. This gradually extended itself in the lingual mass, especially involving its left half. For a year he had not been able to protrude the tongue from his mouth, nor to raise it above the level of the teeth in the lower jaw; the power of articulation is necessarily greatly impaired. There is little or no enlargement of the submaxillary and sublingual glands. In the back part of the pharynx is a swelling as large as half an egg. This appeared before the induration of the tongue commenced, and is probably of a syphilitic character; it may be a node growing upon one of the cervical vertebræ. It occupies the situation in which post-pharyngeal abscesses occur. Such abscesses are, however, very rare, and are usually connected with the tubercular diathesis.

Diagnosis.—The subjective symptoms in this case would seem to indicate that the tumor is benign in its character—the man is of a healthy family, and appears to have no other constitutional taint than that of syphilis; but from the objective symptoms, we should suspect malignant disease. The tongue is very liable to malignant disease, but it usually occurs in older persons, for the most part in those who are over forty-five. There is, it is true, a form of lingual induration which is dependent upon syphilis, which is one of the tertiary manifestations of that disease, and which yields to anti-syphilitic remedies. If this be of syphilitic origin, it will yield to potass. iodid. in scruple doses three times a day. If it do not yield to this treatment, we must consider it as of a cancerous nature.

Treatment.—If this prove to be cancerous, there are two ways in which we may treat the case: 1. The lingual arteries may be tied, so as to cut off the supply of blood from the

organ. 2. If this fail to do any good, the tongue might be removed by the use of the ecraseur, which is an instrument well adapted for use in cases of this description.

JOURNALS FOR NOVEMBER.

THE CLEVELAND MEDICAL GAZETTE.—NOV.

ART. I.—Illustrations of Medical Jurisprudence. By Dr. C. A. HARTMANN, Coroner of Cuyahoga County, Ohio. **ART. II.—Case of Senile Gangrene following Pneumonia.** Reported to the Alliance Medical and Surgical Society. By Dr. JOSEPH PRICE, Randolph, Ohio. **ART. III.—Inverted Toenail.** By Dr. B. WEBER, Cincinnati, Ohio. After enumerating the various methods proposed for treating this painful affliction, the author gives the following as his own plan. *R. Cortic. querci ʒss., gallarum turcicarum ʒi. conscisse coque in aq. commun. ʒx. ad remanentiam, ʒvj. colaturæ addatur argenti nitrici fusi ʒj-ʒj. acet. saturn. ʒij. M. D. S. Embrocatio.* The toe, after being moistened with this mixture, should be bandaged with a strip of linen, the part in contact with the toe being kept thoroughly saturated with the liquid, until a cure is effected. "Soon after the application of this remedy, the swelling of the toe subsides, the excrescences shrink, get black, as also the whole toe; the nail gets brown, soft, brittle, loses its stiffness, and ceases to press and dry into the flesh; the skin pulls off, and out of the matrix; a new and well formed nail will be developed." **ART. IV.—Cephalic Version.** A case communicated to the Wisconsin Medical Association. By Dr. WM. CRANE, Cottage Grove, Wisconsin. **ART. V.—Persulphate of Iron in a Case of Post-Partum Uterine Hemorrhage.** By Dr. GEO. MENDENHALL, Cincinnati, Ohio. After failure of the ordinary means, the hæmorrhage was promptly arrested by injecting into the uterine cavity, by means of a catheter introduced to the fundus, about three ounces of a saturated solution of the persulphate of iron. **ART. VI.—A Continuation of Dr. FISHER'S Case.**

OHIO MEDICAL AND SURGICAL JOURNAL.—NOV.

ART. I.—Notes on some of the Chemical Reactions of Solanine. By Dr. T. G. WORMLEY. **ART. II.—Strychnine and the Treatment of its Poisonous Effects.** By WM. A. BROWN, McConnellsville, Ohio. Certain articles produce their specific effects, as musk, valerian, coffee and tea being general nervous stimulants, while opium, hemp, &c., are cerebral stimulants. Strychnine, being purely a spinal stimulant, is particularly adapted to the treatment of general nervous debility of those organs dependent for their supply of nervous force on the spinal marrow, and hence its value in treatment of constipation, pyrosis, gastrodynia, atonic diarrhoea and dysentery, impotence, and spermatorrhœa, all of which have been permanently cured by it; also functional paralytic affections, without organic disease or injury of the centres. The smallest quantity known to have caused death is half a grain, while there have been instances of recovery after more than a grain had been taken. It being, as before stated, a spinal stimulant, the pathology of its poisoning is "active congestion of nerve fluid in the spinal marrow, which is at first stimulated into an increased exercise of function, finally overwhelmed and disabled, and death ensues;" hence treatment should be, first, to supply the stomach by a prompt emetic, followed by the administration of such remedies as possess a physiological action antagonistic to the poisonous agent; such are found in cerebral and general nervous stimulants, which may be required in large doses. The following combination is recommended. *R. Camphor., assafoetid. aa gr. v. every half hour; if necessary, this may be given in larger doses, combined with morphia, having in view an impression sufficient to restrain the active determination to the spinal marrow, and equalize the distribution of nerve fluid.* **ART. III.—Diphtheria.** By Dr. J. N. BEACH, of West Jefferson, Ohio. **ART. IV.—Marriages of Consanguinity.** Abstract of the Report of Prof. S. M. BEMISS, with remarks, by Dr. A. D. LORD of the Ohio Institute for the Blind.

American Medical Times.

SATURDAY, DECEMBER 22, 1860.

FACTS AND FALLACIES.

THE science of medicine is promoted and made efficacious for good, only in proportion to the number of *facts* upon which it is based; and since a great number of facts on a multitude of subjects are with difficulty acquired, medicine is a science which must always remain imperfect. And while the wisest practitioners will be careful to record their observations, and continue to feel that there is much to be learned, arrogant charlatans, blinded by the glare of false theories, boldly rush into thick darkness to the destruction of thousands of human beings. But unfortunately for the progress of science, it too often happens that pretenders have unintentional imitators, in much that is published, with the view of elucidating preconceived opinions. Hence it is that the dubious authenticity, and frequent fluctuation in the detail of cases, so often involve well authenticated principles of practice. The bias of the mind in favor of preconceived opinions is such, that no one who records cases with the purpose of proving a theory can be depended upon for a full record; and he, who only records such observations as happen to harmonize with a particular inference, brings reproach upon science. When the observations and experiments of such observers as these are repeated by scientific men, other truths are frequently brought to light, which are even more numerous than those which have been educed in favor of the hypothesis. And so often is this the case, that constant vigilance is necessary to distinguish the true from the false—that which conforms with established principles from that which is characteristic of a first view. All scientific persons are familiar with the precarious nature of deductions purporting to be based upon observations relating to subjects which have but recently become the objects of scrutiny; and no person who is conversant with such subjects, will fail to make a proper estimate of such achievements.

Scientific principles can only be established by an assemblage and classification of *all* the facts in a given case, regardless of the fate of the reasoning deducible from them. And those observers who have done most to advance the science of medicine, have accurately recorded all the facts in relation to the subjects under consideration; and although such observers often fail to make useful application of their own observations, they nevertheless prove themselves to be the true benefactors of science by contributing to the resources of their successors, who, in a more advanced state of science, may deduce from records of this kind the most important general principles. Such records serve to point out distinctions and analogies, which the state of learning at the time they were made was incapable of applying.

If the science of medicine was perfect, there would be no necessity of recording facts or of publishing illustrative cases, but while it is necessarily imperfect it is nevertheless progressive. The varying relations of man unceasingly demonstrate new conditions and new phases of disease, in many cases of which we have little else to guide us in the

treatment than the knowledge of remedies applied according to certain established principles.

Devotion to established principles, therefore, is always commendable, because its highest authority is *proof*. Facts—not persons—are authority in the science of medicine; and he who personifies the most of these, is most worthy of honor.

The most valuable knowledge which a physician can acquire is as to the manner in which he can beneficially vary the application of remedies to meet new diseases, or the new phases of old ones as they occur. And it is our deficiency in the perfection of this branch of medicine, which renders a *system of practice* constantly necessary. But the same devotion to facts which induced us to retain an accustomed remedy, should also induce us to abandon it for another supported by a still greater weight of authority; in this lies the distinction between the man of science and the mere routinist.

Every case of well studied disease furnishes a mass of information which can be acquired in no other way; and if all the facts in relation to a case be recorded, they will not only assist us in arriving at correct conclusions in the same case, but they will ever after be a valuable resource of comparison. If, on the other hand, we trust to our memories alone in the observation of disease, much that is observed will be forgotten, and in the long run the mind will become stored with more fallacies than facts:—circumstances of trivial importance which may have happened to chime in with preconceived notions will be remembered to the exclusion of more important matter. The different degrees of attention or interest in particular cases will tend to fix them in the memory, while the more important cases are forgotten. Rare, violent, and quickly fatal cases will be remembered, while the particular circumstances which have rendered them so, will never recur to the memory. Observations of this kind contribute nothing to the advancement of science. They are always more or less vague and unreliable, rarely serving any useful purpose. They are “experience” without a record—consisting more of opinions than of facts; knowledge that is burdensome to its possessor, and wearisome to an audience. But who that has really entered the lists of science—practising the truths that are known, and ever assiduous to elicit other truths—is not often made to lament the position of the revered veteran in default of a record? And of the veterans themselves, how many are there, indeed, who are often made to regret not having some other means than their memories by which their experience might be profitably applied.

It is evident that if we would arrive at correct conclusions we should make a record of the facts as they occur. The labor of recording observations is as nothing compared with its utility. For besides the fund of knowledge which is constantly accumulating, the habit of keeping it is of inestimable value in the cultivation of the judgment—its exercise constantly adds to the power of observation; and that which was at first a burden, becomes a pleasure from the facility with which it can be accomplished. The first aspect of a case of disease to such an observer, presents some idea of its nature; whether it be acute or chronic, and what functions are involved. The mind is at once fixed upon the most important points of study, and the way being open, the prearranged systematic means are progressively applied. The individual is designated as a subject of disease by his physical organization, and all his surroundings are weighed

in the balance against his present condition; and the state of his functions are inquired into *seriatim*. The results of such an examination are certain and uniform, and truths are evolved no less beneficial to science than to the observer.

When a large number of cases are thus carefully recorded, it is easy to determine the relative frequency of every phenomenon, and the comparison of each series of phenomena with the others will determine the relation of all. The process of analysing recorded observations is, of all exercises, the most beneficial in its influence; facts are generalized of perpetual utility, and these form the bulwarks of our science. Such records are the source of all the knowledge we possess. It is by them that we have become acquainted with the history of disease in different ages and countries; the appearance and the disappearance, the increase and the decrease of particular maladies, and the tendency of certain localities, professions, and modes of life to protect from or to expose to diseases of particular types; they are the source of all our knowledge of diagnosis and of prognosis, and they form the only convincing proofs of the efficacy of remedies. It is by records that we can prove the mortal effects of drugs ignorantly applied through the instrumentality of quacks, with no less certainty than we can prove the fatal effects of intemperance; and it is by them that we can prove that a great mortality is not a necessity of city population. It is by records that we can refute the notions of the skeptical—lay or medical—that the powers of the constitution are alone adequate to the cure of disease; and it is by records that we can show that few—if any—diseases can be safely left to the powers of the human system alone, without danger of permanent disability or premature death. Finally, and in brief, all the advance the science of medicine has ever made, has been made by a few utilitarians of every age who have followed the example of Hippocrates in **KEEPING A RECORD OF THEIR CASES.**

THE WEEK.

THE threatened secession of Southern medical students from the University Medical College, has at length been carried into effect, but not from political considerations. The grievance now is an alleged indignity offered to DR. AYLETTE, the well known preceptor of large classes of Southern students, by the authorities of that College. The following extracts from morning papers will give our readers all the information which we have of the nature of this movement.

The letter from Professor Draper at which the students have taken such umbrage, is as follows:—

DR. AYLETTE:—Dear Sir—Will you please give me replies for the use of the Faculty to the four following questions:—

1. Have you informed any student that it is not necessary to take out his tickets at the beginning of the session, and that the Faculty did not require their fees until Christmas?
2. Have you taken money from students who had brought it to New York for the purpose of paying their college fees, and invested it, for your own profit, with business men?
3. Have you, after receiving New York funds, given to any uncurrent notes at a heavy discount, keeping the difference for your own use?
4. Have you failed to repay any student who had

deposited his money for safe keeping, on the excuse that those to whom you lent it were unable to keep their engagements with you?

Your early reply to these questions will greatly oblige

J. W. DRAPER,

President Medical Faculty, N. Y. U. M. C.

At a subsequent meeting of Dr. Aylette's students, the following resolutions were passed:—

Whereas, a communication was received by Dr. P. A. Aylette, our associate and friend, from Professor John W. Draper, President of, and in behalf of the Faculty of the Medical Department of the University of New York, propounding certain interrogatories, which, in their manner and language, we think, contain imputations against the character of Dr. Aylette, which we know to be unfounded and untrue, and which deservedly meet our unanimous disapprobation, and which, we regret, are calculated to militate seriously against the prosperity of this institution—in proof of which, we have only to look at the large majority of students from that section of the country which has been, and will be, influenced by the existing state of affairs. Therefore,

Resolved, That in our professional, social, and personal association with Dr. P. A. Aylette, we have ever found him the courteous gentleman, the prudent counsellor companion and friend; and that any imputation cast upon his personal integrity is untrue, and we boldly assert that the originator of these charges is guilty of a malicious and unprovoked slander.

Resolved, In our opinion, the long-continued and most successful instructions of Dr. Aylette, of which our predecessors and ourselves have been the recipients, in the medical department of this University, have materially contributed to the attainment of its present prosperity.

Resolved, That in our connexion with this institution, during the present and previous sessions, we have always found Dr. Aylette its unflinching friend; and in order to promote its interests has left no efforts untied to prevent students being led astray by the political agitation of the times. And so far from deriving pecuniary profit from the use of their money, has incurred, to our knowledge, personal loss in affording them accommodation, by the exchange of uncurrent for current funds.

We learn further, that PROFESSOR DRAPER immediately resigned his professorship in the University, on learning the action of the students, but that the Faculty have unanimously sustained him, and declined to receive his resignation. A subsequent meeting of the class strongly endorsed PROF. DRAPER's course towards Dr. Aylette, and deprecated his retirement from the college. We hope he will be induced to withdraw his resignation, as it would be a calamity to the entire profession of this country to lose as a teacher in our public institutions one so accomplished and so widely distinguished.

We are informed at the last moment that the course of Professor Draper has since been approved by nearly the whole class, and that few if any of the students will withdraw from the school.

We learn from *The World*, that the *Medico-Chirurgical College* has had another meeting, presided over by DR. JOHN O'REILLY. A paper was read on the "*Nature and Treatment of the Reparative Process*," which seems to have thrown the Reporter into an ecstasy, wherein he emitted the following sentimentalism:—"The beautiful coaptation of the busy harmonious activities which nature summons to repair an ordinary wound as soon as inflammation has subsided, are among the most instructive of those countless marvellous proofs of the Creator's wisdom and beneficence which fill that temple of mystery, the human body."

THE PUBLIC will regret to learn that a member has lost a case of croup, and universal sympathy will be excited by the admission that the child died of gangrene! It is stated in this very authentic report: "that the child from whose throat was extracted the diphtheritic membrane, exhibited at the last meeting, had died two days afterwards, of gangrene." A more shocking termination of croup than that by gangrene the public cannot well conceive.

Reviews.

QUACKERY UNMASKED: or a Consideration of the most prominent Empirical Schemes of the present time, with an enumeration of some of the causes which contribute to their support. By DAN KING, M.D., Fellow of the Mass. Medical Society, N. A. New Edition. New York: S. S. & W. Wood. 1860. pp. 334.

We differ with Dr. King in regard to the method of giving to legitimate medicine a proper place in public estimation. He would expose the errors and deceits of irregulars to popular gaze, and thereby hope to create a sentiment adverse to their various systems of practice. But have not such efforts hitherto failed of accomplishing any good? We believe they have, and we are not inclined to consider that physician profitably employing his leisure time, who is engaged in the hopeless task of endeavoring to convince his neighbors, by mere words, that his competitor is deceitful. There is a more certain and pleasanter road to success in unmasking quackery than the one he has chosen. Let him put forth all his efforts to elevate his own profession in the scale of learning and moral excellence, and he will labor to some purpose. If he will every year establish in business in a country town, a *thoroughly* qualified physician, he will do more to exterminate quackery than by a thousand such volumes as this. True worth in our profession will always be well rewarded, and we have long been convinced that the true medical safeguards of a community are the young men who graduate from our hospitals fully appointed to take a high rank in society of moral and educational qualifications. For these reasons we regard such compilations as this of Dr. King as valuable time mispent by those who are competent to do for medicine a higher and nobler work.

AN EPITOME OF SURGERY. By J. BEADNELL GILL, M.D., late House Surgeon to the London Hospital. London: H. Baillière; New York: Baillière Brothers. 1860.

THIS little volume, which may be carried in the side pocket, consists of a concise explanation of all surgical diseases and accidents, and directions for treatment. It will prove oftentimes an acceptable pocket companion to the country surgeon.

AN EPITOME OF BRAITHWAITE'S RETROSPECT OF PRACTICAL MEDICINE AND SURGERY. In six parts—Parts IV., V., VI. By WALTER S. WELLS, M.D. Published for the author: By Charles T. Evans, New York.

THE design of Dr. Wells in the preparation of this work, is to bring within a narrow compass the vast amount of material that has accumulated in Braithwaite's serial publication. To accomplish this, the author has re-arranged the entire matter under heads of subjects placed in alphabetical order, and then condensed each article so as to give only an epitome of its matter. In this manner he has been able to comprise the entire forty volumes of that publication in six Parts, which are to be bound in two volumes of moderate size. On careful examination of the several Parts, we are gratified to find that notwithstanding the immense compression to which Dr. Wells has submitted this standard

semi-annual, he has rejected nothing of value, but affords us the very essence of that voluminous publication in a cheap and most convenient form. He deserves the support of the profession in his undertaking.

MEMORANDA MEDICA; OR NOTE-BOOK OF MEDICAL PRINCIPLES, being a concise syllabus of Etiology, Semeiology, General Pathology, Nosology, and General Therapeutics. With a Glossary. For the Use of Students. By HENRY HARTSHORNE, AM. M.D., Professor of Theory and Practice of Medicine in the Medical Department of Pennsylvania College, &c., &c.

PROF. HARTSHORNE has succeeded in preparing a very convenient note-book for medical students, of all that relates to a course on practical medicine. The work is divided into four parts as follows: Part I. *Etiology*; Part II. *Semeiology*; Part III. *General Pathology*; Part IV. *Nosology*; Part V. *General Therapeutics*. In each division the subjects are taken up in the order in which they would occur in a course of lectures, and brief explanations are given of the various terms employed, and the causes, symptoms, progress, and termination of diseases are minutely but briefly sketched. We commend the work to the attention of students.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, OCT. 24, 1860.

E. KRACKOWIZER, M.D., President, in the Chair.

ANOMALOUS TUMOR OF BREAST.

DR. KRACKOWIZER exhibited a rare specimen of mammary tumor, the history of which was as follows: Mrs. H., a native of Germany, æt. 35, widow, has been married only a few months, has had no children, always been in good health, and none of her relatives has had cancer. About the commencement of 1856 she noticed a small movable painless tumor inside of the right nipple. At first it grew slowly, but half a year after it had been discovered it attained a considerable size, and was the seat of not unfrequent, though not very great, pains. December 2, 1856, the breast was removed. The whole mass weighed three and a half pounds. The axillary glands were not affected. The wound healed three months after the operation. One year afterwards a tumor formed in the cicatrix, which, after six months, attained the size of a hen's egg. In consequence of the friction of the garments it commenced to bleed. The hemorrhages, though frequent, were not abundant. For two years she was in the hands of quacks, regular practitioners only being called once or twice for alarming hemorrhages. Such a one occurred May 28, 1859, which came very near carrying her off. The tumor gradually reached the present size, not growing much the last six months, never being very painful, and telling on her health only by repeated hemorrhages. She had no fever, and the axillary glands remained unaffected. Dr. Wm. Detmold removed it in October 18, 1860.

The mass was suspended by a skin pedicle an inch and a half in circumference, germinating from the cicatrix about midway. From this short pedicle the mass swelled out in a tumor six inches long, six inches wide, and two inches deep, which is best described by saying that it is the very

type of cauliflower excrescence. It resembled a huge condyloma by its many nodules of different size, divided by more or less deep fissures. Its color was that of healthy granulations, being on different spots on the surface of the nodules overlaid by a layer of white epidermic-like substance. The tumor weighed two and a half pounds, nowhere ulcerated on the surface, and was in all its parts firm and elastic. On being cut through it had a pale-red-dish amber color, reflecting the light like bacon. Its texture was mainly fibrous, the fibrous tracks taking their course and spreading from the common centre towards the surface, and expanding into a great number and variety of papillary appendices. A great number of lamina of pretty large blood-vessels showed themselves on the different cuts made in different directions in the mass. From each cut an abundant, sticky, transparent juice of pale amber color exuded. The centre of the tumor was occupied by a cavity running in the direction of the longitudinal diameter three inches long and two and a half inches wide. Its walls were formed by a layer of about one-fifth of a line in thickness, of an appearance like macerated epidermis. The cavity, which, from the almost immediate contact of its walls, was reduced to a mere slit, contained a greasy, greyish white, grumous material, like *vernix caseosa*. The microscopical examination revealed a great variety of different textures, very rarely combined in the same tumor. 1. The juice gotten from cutting in the tumor contained a great variety of cells, some oval, some angular, some caudate and irregular, of the most fantastic forms, but all having the same large shining nuclei and nucleoli. Some cells contained two nuclei, each with a nucleolus, some one large, elongated, or biscuit-shaped nucleus with two nucleoli. No cell contained more than two nuclei, but the greatest number only one. Alongside of the cells just described were found fusiform and fibro-plastic cells of great length, with smaller nuclei than those of the cells just described. The serum in which these cells floated, by addition of acetic acid, coagulated into a fine, granular substance. 2. The texture of the solid parts of the tumor varied greatly, whether the objects for the microscope were taken from the surface of the cauliflower excrescences or from their interior. Objects from the surface showed nothing but epidermoidal and epithelial cells. These cells were arranged in strata of different thickness, according to the circumference, whether the objects were taken from the larger and more exposed nodules or from the more tender and smaller ones. The cells in the superficial strata were all like those of the same strata of the epidermis, folded, shrivelled to mere scales, many without a distinct nucleus. The more removed from the surface towards the substance of the growth the more regular and succulent became the cells, assuming the epithelial character of the pavement epithelium of mucous membrane of the mouth or vagina, from which they could not be distinguished by any means. The deepest layers had smaller, more oval or rounded cells, but all with the characteristic nucleus of epithelial cells, and entirely different from the nucleus of those cells which were described in the serum of the cancer juice. This arrangement of the different varieties of epithelial cells could best be demonstrated by making thin perpendicular sections of the walls of the above-named central cavity of the tumor. Thin sections of the interior of the growth showed as the base structure prevalently amorphous, here and there slightly striated connective tissue, in which were interspersed, without regularity, the cells described as floating in the cancer juice. This connective tissue was in many places interrupted by darkly striated tracts of seemingly fibrous structure, crossing and interlacing each other in different, mostly very acute, angles. If such objects were very thoroughly subjected to preparation with needles one could see sometimes on the edges of these tracts, that they consisted of fusiform and fibro-plastic cells of the same appearance as those suspended in the cancer juice. In very thin sections the addition of acetic acid brought out the nuclei of these cells beautifully, and corroborated the opinion that these tracts of seeming striated connective tissue

were composed of fibro-plastic cells very closely packed together in the direction of their longitudinal diameter. No epithelial cells could be found in the interior of the tumor, and it is worthy of remark that in none of the numerous sections put under the microscope could I detect an alveolar arrangement of the cells. A great number of blood-vessels transmigrated the substance of the tumor, and in a couple of objects I succeeded in tracing colossal capillaries forming long loops close under the epithelial stratum of the surface of the growth. Another peculiarity of the tumor was this, that in perpendicular sections, taken from any part of the walls of the central cavity, right below the epithelial stratum, the substance of the tumor showed a beautiful network of thick elastic fibres, which retained their dark, distinct contour for days in specimens subjected to the effect of acetic acid. From the premises I am inclined to class this tumor as far as its external appearance goes under those commonly called *papillary tumors* or *papillomas*. From its microscopic appearance, taking in consideration its rich vascularity, I should call it following the classification of Paget, *hard medullary carcinoma*. The combination with *epithelial cancer* on the surface is something new to me, and must be of very rare occurrence—at least I do not find it in some of the authorities which I consulted. Paget himself has never seen it, and mentions two observers as having found the combination of epithelial and medullary carcinoma. The great rarity of epithelioma of the breast as an original growth is apparent from the fact that Velpeau in the last edition of his *Maladies du Sein* expressly mentions that he does not know one case either in his own practice or in literature. In fact Paget is silent about it, so are Hannover and Frerichs, who wrote monographs of epithelial cancer.

The Society then adjourned.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, NOV. 21, 1860.

DR. JOHN WATSON, M.D., President.

NEW DEODORIZING AGENTS—A VIVIPAROUS FISH—HYGIENE OF THE SEWING-MACHINE—NEW INSTRUMENT FOR CRANIOTOMY—POSTURAL TREATMENT OF A LABOR WITH PROLAPSE OF THE FUNIS UMBILICALIS.

DR. B. FORDYCE BARKER called the attention of the Academy to three specimens of deodorizing agents which had been sent to him by Dr. Skinner, of Liverpool, for trial. They possessed two very important qualities: cheapness and efficiency. The first was composed of fifteen ounces of calcined oyster shells, and sixty-four grains of oil of tar. The second preparation was more easily made, and was composed of prepared chalk, $\frac{3}{4}$ xv.; caustic lime, $\frac{3}{4}$ i.; oil of tar, sixty-four grains. The third preparation, which was liquid, had the following ingredients: Tr. camphor. and myrrh. aa 3 iij.; lin. saponis, 3 ij.; acid. acetic. \mathcal{M} xx.; ol. picis, q. s. M.

The first preparation, when used, should be amalgamated with from two to four tablespoonfuls of the finest dry bran. The application of the deodorants is very various—for instance, the powder prepared as above may be sprinkled upon the discharges in the chamber with the effect of correcting the unpleasant odor at once. The liquid preparation can be used with an injection—can be applied to the pudendal cloth, and be employed to very great advantage in cancer of the womb, incontinence of urine, etc., etc. Dr. Barker, in conclusion, highly recommended the preparations.

PROF. A. C. POST exhibited a specimen of a female fish, taken from San Francisco Bay, in California, containing within its abdomen a sac subdivided into a number of pouches, each of which contained a young fish. Until the year 1852, no viviparous fish was known to naturalists. On the 7th June of that year, Mr. A. C. Jackson caught

with a hook in quick succession, two fishes of the same species, male and female. On opening the female, he found it to contain in distinct pouches nineteen small fishes, which, when put into a basin of salt water, swam about in a very lively manner. He sent an account of the occurrence to M. Agassiz, who was at first disposed to be very skeptical on the subject. But the following year, Mr. Jackson and Mr. T. G. Cary, Jr., sent a number of specimens to M. Agassiz, who could no longer withhold his assent from the fact that the fish were truly viviparous. Mr. Agassiz found that, among the specimens sent to him, were two distinct species, belonging to the same genus. He named the genus *Embrotoca*, and the two species, 1st, *Jacksoni*, 2d, *Caryi*. He regards the sac containing the progeny as the lower part of the ovary, and the pouches as formed by folds of the same. All these pouches communicate by elongated slits with the oviduct, which terminate a little behind the anus, and at its outlet is surrounded by a strong sphincter. M. Agassiz regards the pregnancy of this remarkable genus of fishes, as an example of normal ovarian gestation. The young does not seem to be connected with its mother by any umbilical attachment.

Professor Agassiz has published a paper on these fishes in *Silliman's Journal* for Nov., 1853.

DR. A. K. GARDNER read a paper on the hygiene of the sewing-machine. (See page 420.)

DR. DOUGLAS said: None of us will deny the great benefit of any machine the object of which is to relieve labor; but, sir, it strikes me that Dr. Gardner has not gone to the true sources for his information—to the operatives themselves—but seems to have held communication only with the employers. I have had my attention drawn to this subject during the last few years, and have made some investigations in relation to it. Instead of going to the proprietors of large establishments, I sought information from those who had the supervision of the operators, and also the operators themselves. A woman who has charge of fifty girls employed upon the machines, told me that many of them were obliged to be in bed every three or four days during a month, and that in almost every instance during their menstrual period they were obliged to refrain from work. She had also seen some go into a rapid decline. Another point which he makes in relation to the effect of the work upon the eye, I think is incorrect. In many instances that have come under my observation, not of poor girls in factories, but ladies possessing machines, the eyesight has become so much affected that they were obliged to give up the use of the machine.

DR. GARDNER maintained that Dr. Douglas's idea of the paper was an incorrect one. Dr. G. had not only obtained his information from the employers, but also had the direct testimony of the operators themselves. In regard to ladies using the machines in their own families, he stated that the want of knowledge and practice caused them to work unnecessarily hard, hence the straining of the eyes and prostration. On the other hand, those accustomed to the work could talk and look about the room during the greater part of the time, the main trouble being to prepare the work for the machine.

DR. DOUGLAS, though he regarded the machine as a very useful invention, did not think that in itself it was possessed of any hygienic properties. So far as it lessened the time for labor and decreased its amount it was well enough; but, on the other hand, the constant movements of the lower extremities in a sitting posture would tend very naturally to produce congestion consequent upon the increased flow of blood to the parts, which disposition extending to the neighboring organs, would give rise to a corresponding hyperæmia of the pelvic organs with all its attendant ills.

DR. BARKER referred to a case of a lady who was a patient of his, and who had some time ago purchased a sewing machine. It was a very fascinating employment for her to sit beside it and sew, and finding it difficult to use both feet, she used only one. The consequence of this was that at the end of a fortnight she suffered from an attack of

acute synovitis in the knee of that side, which confined her to the house for several months.

DR. T. G. THOMAS next exhibited a new instrument for the performance of craniotomy, and gave also the following account of the various instruments which had been invented for that purpose.

Since the period at which the operation of craniotomy was first established for the relief of dystocia, a large number of instruments have been invented for the performance of both its parts, perforation and extraction. In connexion with those intended for the former it is my intention to occupy for a few moments the attention of the Academy this evening. In ancient times quite a variety of perforators were employed, into a lengthy history of which it will be altogether unprofitable to enter at the present moment. Avicenna employed instruments which at the same time that they perforated served as crotchets; Mauriceau followed his example, the *tire-tête* of the latter being too well known to require more than a mention. Sevrin, Dionis, Fried, and others, made use of instruments which were guarded, and Sir Fielding Ould, at a still later period, invented one called the "*Terebra occulta*" which consisted of a species of sheath containing a knife which could be projected at will. By some a simple bistoury or ordinary surgical knife has been employed; by others a plain spear of steel with a head like that of an arrow, while others preferred a species of scissors whose cutting edges were on their outer borders.

But as my intention is not to give a history of this instrument I will pursue the subject no further. It will be sufficient to give some idea of the great variety of perforators at various times introduced, to state that in the thesis of a young Frenchman, who wrote in the year 1832, sixty were mentioned. How many have since been added to the list we will not stop to inquire, but will at once proceed to those most recently invented, and most commonly used at the present day.

Beyond all comparison the perforator known as Smellie's scissors is more commonly employed than any other. This instrument, too well known to require a description, has been modified in various ways. By Denman the shoulders were altered and the inner edges of the blades made dull; by Nægele the joint was so changed that the blades could be separated by compressing the handles; by Davis the entire shape of the instrument was altered, while the principle of action of Nægele's instrument was preserved, and many minor modifications have at various times been suggested by others. The majority of physicians have never employed any other than one of these varieties.

Recently Mr. Hypolite Blot, of Paris, has invented an instrument acting upon precisely the same principle as the scissors of Smellie, but consisting of two discs of steel shaped like arrow-heads, which, being introduced lying one on the other, are separated at will, and thus cut with the outer edges, which are sharp.

In Germany a species of guarded trephine is, as I am informed by Dr. Noeggerath, commonly employed. Upon theoretical grounds I should suppose that it would not act, but Dr. Noeggerath tells me that it is both speedy and facile of application.

Although Smellie's scissors answer the purpose for which they were intended, they are by no means perfect, and really it is surprising that they should have so long held precedence over all other varieties. I do not express surprise that they are preferred to all others now before the profession, for they are really as good as, or better than, any of their competitors; but it is astonishing that so many efforts should have been left us so much to desire in an instrument of such importance to the obstetrician and his patients. It is with an earnest hope that some of the dangers and inconveniences attached to them may be avoided, that I have been induced to bring forward a new instrument at this time.

The chief of the objections to Smellie's scissors are these:—

1st. It is difficult to penetrate the bones of the skull when much ossified, sometimes almost impossible.

2d. In forcing them against the round head they are very apt to slip and cut the mother.

3d. The operator cannot open them himself, and has to trust this to an assistant, one of his hands holding one shank and the other guarding the points.

4th. As the outer edge of each blade is cutting, it is difficult to guard both at the same moment, and sometimes, jerking rapidly through the tissues, the os is wounded.

The instrument which I now show consists of a steel or iron tube ten inches long (with the handle, thirteen inches), which ends in a screw, has a shoulder two inches from its extremity, and hides within itself a cutting blade which is thrown out of its bed by the hand of the operator. The blade joins the body by a slot and pivot, which renders its removal easy for purposes of cleansing. It is hoped that it will possess these advantages.

1st. There is no difficulty of introduction, for the screw being a double one catches readily in the scalp, and penetrates the skull with the same ease and by the same force which would cause a gimlet to enter wood.

2d. It will not slip, for it is not pressed against the skull at all, but is wormed in by the process of boring.

3d. The operator himself throwing out the blade, he can regulate its progress, and thus prevent its cutting the surrounding parts—an advantage, however, possessed by Naegele's instrument.

4th. There is only one cutting edge, and, consequently, this is easily guarded, the attention of the operator not being distracted by one on the other side acting in a different direction. Two or three essays have convinced me that the instrument will penetrate the skull with great facility, certainty, and safety for the mother.

In presenting it to the Academy, I wish to be distinctly understood as in nowise entering a plea for a more frequent resort to craniotomy, an operation which must diminish in frequency of performance *pari passu* with the advance of the obstetric art. But if (as no one will deny) this sad operation must in some cases be done, it were better that it were well done.

Any instrument from Smellie's scissors to an ordinary pocket knife, will answer for its performance in the hands of an adept; it should, however, be remembered that instruments should not be framed to suit adepts, but maladroit and inexperienced operators. Nor should they be constructed to aid in giving brilliancy to the skilful surgeon; they should, as far as possible, protect the tyro from the misfortune of doing injury by reason of his incapacity or inexperience, and his patient from suffering at his hands.

So many trifling and insignificant modifications of the various instruments employed by the obstetric surgeon have been made of late years, that a prejudice against further change seems to have sprung up in the minds of many practitioners who, when improvements are suggested, are inclined to quote such hackneyed phrases as these, "one instrument answers as well as another," "an ordinary jack knife will do as well as anything else," "it is not the instrument but the hand which uses it which insures success," and many others to the same effect. But what can be more thoroughly opposed to progress than such views? What can be more culpable than for those having human life in their keeping to frown upon advances in the implements which not only they, but many who have just graduated, many who unfortunately are very ignorant, and many who have never before operated have to employ, and this too in an age when the rifle and other implements of war, the machines used in agriculture and in housewifery, in fact all

those employed in civilized life, are engaging the studious attention of thousands of ingenious mechanicians? No one will deny that the speculum of Sims, the forceps of Elliot, and the lever of Gardner, are great improvements upon those employed twenty years ago; and all will admit that however skilful the hand, however capable the operator, the inconvenience, suffering, and danger resulting from their use will be much less than if older instruments were still adhered to.

Finally, let me call attention to the fact that although the steps of the operation of craniotomy are simple, its mortality is very great, according to Dr. Fleetwood Churchill one in five mothers perishing, and of course all the children being sacrificed. Surely whatever may diminish one tithe of this mortality is well worth the careful study of the medical profession.

DR. WOODHULL.—I have had occasion to perform the operation of craniotomy three times, and can fully endorse the objection to Smellie's scissors as offered by Dr. Thomas. I think that the thanks of the profession and the mothers are due to Dr. Thomas for introducing this grand instrument.

DR. BARKER.—After listening to the model paper by Dr. Thomas it would hardly seem possible to add any remarks which should attract the attention of the Academy; and I do not propose to, except simply to express my thanks to the author for the instrument, which I had the pleasure of examining a few weeks since. I never have applied it, and I hope the time will be long before an opportunity offers to do so, but the instrument seems to me to perfectly and safely fulfil its end more than any I have ever seen. I only rise to express the hope that Dr. Thomas will construct for us another instrument which shall be equally efficient in accomplishing the other part of the operation—the extraction of the child; for we certainly need a new instrument for that purpose. I only wish to fully endorse one sentiment in the paper, that "as obstetric medicine progresses, the necessity for operation will diminish in the exact ratio."

I am happy to have an opportunity to add a word to the praises which this instrument has received. I am glad to do so, because from frequent use of the instrument I am somewhat acquainted with the deficiencies of former patterns and the necessities of the instrument. In the cases where I have performed craniotomy during the last sixteen years, from thirty to fifty in number—I cannot exactly say how many, mainly in consultation among the poor residents of the city—I have ordinarily used an instrument differing from any shown here by the speaker, a scissors having sharper cutting edges than that presented to-night, but guarded by a metallic slide which entirely prevented any injury from being effected by it while introducing it. But, when the point of the instrument had been carried up to the point—necessarily to some distance, when the head was above the brim in distortion of the pelvis—and the guard removed, then these sharp edges did no little damage, if not to the soft parts of the mother, at least to the fingers of the operator, as cuts upon my hands remaining for two or three weeks have repeatedly evidenced.

Then, too, all of the instruments used till now are to be thrust forcibly through the calvarium—and books of obstetrics especially advise, in opening the head, to avoid the sutures and foramina—and sometimes they will slip and then the sharp point and edge go into unknown parts, and are perhaps sometimes the cause of the opportunity for the subsequent post-mortem investigation. With the instrument now exhibited such accidents cannot happen.

It will also be found especially adapted in those rare cases where it is necessary to diminish the head through an undilated os, as in cases which I have recorded in the American edition of *Tyler Smith's Obstetrics* (Lecture XXXIV.). It is evident that with it there will be no danger of injuring the cervix uteri, unless by the most culpable carelessness in the manipulation.

Another point of excellence in this instrument—and



which I had the opportunity to see during its creative state, when attending a patient in consultation with Dr. T., where, in the prospect of its use, he was engaged with an old file in polishing some of its roughnesses—is in the extent which may be given to the opening made in the head. Most of the many modifications of Smellie's scissors are made so dull, in order to avoid injury, that they require great force to make any opening, and the small limit of their separation prevents this from being made sufficiently large to allow the exit of its contents and the desired collapse which follows.

Thus we have the old perforator, as it would appear now, fully perfected, being alike a blessing to mothers, a convenience to the obstetric operator, and a lasting honor to its ingenious creator.

Dr. MARTIN read the following:—On the morning of the 11th of November last, Mrs. D., aged 32 years, in labor with her fifth child, had very severe labor-pains for three hours, the most of which time she was on her feet, when the membranes were ruptured, and a large amount of liquor amnii was discharged. She then sent for me. After she was put to bed I found the os uteri fully dilated and relaxed—the occiput in relation with the left acetabulum—the vertex well down—and the head about to enter the superior strait. The vagina, below the vertex, was filled with coils of the funis, in which pulsation was tolerably distinct, in the absence of pain, but scarcely perceptible when the head was forced down by a labor-pain. The cord had descended at the curve of the brim between the right sacro-iliac synchondrosis and the promontory of the sacrum.

The patient was immediately placed upon her knees, with her face down upon the pillow, as recommended by Dr. T. Gaillard Thomas in his "Essay on Prolapse of the Funis." The fingers of the left hand were then introduced, and efforts made to replace the cord. But its coils could not, in that manner, be conveyed to the point from which gravitation would cause them to slide down into the body of the uterus. The hand was then introduced, and the fingers passed along the side of the foetal head, carrying the cord to the brim at the sacro-linea pectinea, and holding it there until the last loop glided downward over the breast of the child. If the funis had descended on the pubic side of the head it could, no doubt, have been easily returned by the fingers. But when it passes down to the position in which I found it, at the time the membranes are ruptured, or afterwards, the operation, as Dr. Thomas has shown, will almost certainly prove a failure unless the whole hand be introduced.

After the withdrawal of the hand, the labor-pains were very strong and frequent. But I soon found that if gravitation aided in the restoration and retention of the funis, it also acted with decided effect in delaying the entrance of the foetal head into the cavity of the pelvis sufficiently to prevent a recurrence of the prolapse, when a change in the position of the patient should be made. For the longitudinal axis of the uterus being nearly vertical, the recession of the head, during the intervals between the labor-pains, was much greater than usual, and the progress of the labor, closely observed for half an hour, was scarcely perceptible.

To meet this difficulty I placed a small blanket, folded into a thick cushion, between the bed and the uterine tumor upon which it rested in the absence of pain, and during each labor-pain I passed the right hand under the fundus uteri and pressed upward, in the direction of the superior strait with sufficient force to counterbalance the weight of the uterus and its contents. I now had the satisfaction to find that in twenty minutes the head had entered into the cavity of the pelvis. The patient was then turned upon her back, and in thirty minutes more the labor was terminated as if there had been no complication from the beginning. Mother and child did well.

This is the first labor, with a prolapse of the funis, that has occurred in my practice since Dr. Thomas read his

valuable paper on the subject before the New York Academy of Medicine; yet, such was the confidence that I had in the plan of treatment he proposed, that I did not entertain the slightest doubt as to the result, from the moment my finger touched the cord until the woman was delivered. And it may be safely asserted that henceforth this complication of labor will cease to be a terror to the accoucheur; and that experience will soon give the "*Postural Treatment*," in such cases, "its proper place among the resources of obstetrics."

Dr. WOODHULL referred to a case of prolapsus of the funis that was relieved by a resort to Dr. Thomas's method. The Academy then adjourned.

Correspondence.

LIND MEDICAL COLLEGE.—CITY HOSPITAL OF CHICAGO.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The object of this communication is to make some corrections of statements made by your correspondent "Pilula" of this city. It is asserted by him that the number of students in attendance upon the lectures of the Lind Medical College is less than last year, that the course is not satisfactory, and also "discouraging to those who inaugurated the new plan of elevating the standard of medical education." The class this year numbers over forty very intelligent students—besides some practitioners from different sections of the North-West—an increase of 50 per cent. over the last year's class. The friends of the institution have yet to learn that its measure of usefulness is governed by the number of students matriculated. The fact that the College gives a *bonâ fide* course of over five months, without the usual clap-trap preliminary lectures, that she demands of the students that they shall pass rigid examinations, not only during each session, daily, but at the close of it, before they are advanced to the study of the more difficult and practical branches of medicine; that they shall be proficient in anatomy, before they attend lectures upon surgery, for instance; that they shall be proficient in inorganic chemistry, before they attend lectures upon organic chemistry, toxicology, or medical jurisprudence; explains why the halls of the College are not filled, as they might otherwise be, with undesirable students who can never adorn the medical profession, and explains the reason why the present class are enthusiastic in their studies—hard-working, feeling that their diplomas will be of some credit to themselves. The friends of this school aim, and will succeed in always giving to the public only well qualified and useful physicians, no matter how few. The school is well endowed through the munificence of SYLVESTER LIND, Esq., and the professors have not the slightest *pecuniary* motive to swell the classes by accessions of ill prepared students only prompted to attend lectures simply for a diploma.

Again, your correspondent has made frequent mention of what he calls the "City Hospital of Chicago." Our city has a hospital building, but no hospital. Four years ago, or thereabouts, the building was completed by the city, and an attempt was made to organize a medical staff composed of regular practitioners and homœopaths. Some of the former accepted their appointments, others refused them; and whilst the profession were like to have a pretty quarrel over the thing, the new Mayor found that the city authorities had no right to construct, much less to open and support a hospital, and they so decided, this duty evidently belonging to the county officers or board of supervisors. The latter were unwilling to undertake it, as they provided for the sick poor at the county house, and could see no need for it at present; hence the building was

idle pending the informal negotiations for its sale by the city to the county. Since then some half-a-dozen physicians obtained permission to use the building, and received from the city a lease for three years free of rent, they keeping it in repair, opening it at their own expense, and agreeing to receive such patients as the authorities send them at three dollars per week. They succeeded in obtaining a so-called warden, who moved into it and receives boarders; the sick to be gratuitously attended by the physicians *when so understood*. These physicians are *self appointed, responsible to no authority*, during the term of their lease, and are repudiated by the city, as shown in the following extract from the *Chicago Democrat* of Sept. 6, 1860, edited by John Wentworth, the present Mayor of the city.

"CITY HOSPITAL.—It is well known that the City Hospital has been leased to several allopathic physicians of this city, *who alone are responsible for its management and for all its liabilities*. We have been requested to publish the following extract from their report, and shall be willing to do the same for any of the other hospitals of Chicago. The report speaks of these physicians having the exclusive patronage of the county. Lest we should be called upon by other hospitals to explain this, we state that the county physician is one of the lessees from the City. The following is the report." etc., etc.

Chicago, Dec. 8, 1860.

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NEW YORK ACADEMY OF MEDICINE.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—You have rendered good service to the medical profession throughout the country by your exposure of the abuses in the N. Y. Academy of Medicine, more especially that of *advertising its proceedings* in the newspapers. We, in Connecticut, have watched with much interest the rise and progress of this great metropolitan institution. We have rejoiced in the good influence which, in its earlier years, it exerted in promoting the cause of legitimate medicine and of sound medical ethics; and we had gladly hoped that this influence for good would always have been sustained. But, for the last few years of its history, these hopes have been doomed to disappointment. What has produced this change? Why do we no longer hear from the venerable founders, the great and shining lights of former days, and why are their once familiar faces no longer seen? Young men have usurped their places; *stereotyped* speakers waste the time and weary out your patience with their *ceaseless eloquence* and petty bickerings. We ask, Messrs. Editors, has not the Academy departed from its legitimate aims? Has it not become an instrument in the hands of a few individuals, to subserve their own private ends? Is it not for this reason that *reporters for the daily press* have been tolerated, and even invited to be present; and do not some Fellows of the Academy themselves (*proh pudor!*) furnish reports for the newspapers? We consider that this cause, above all others, has most contributed to the downfall of the Academy. In confirmation of these views, permit us here to quote the language of the *Boston Medical and Surgical Journal*.

"We are entirely unable to account for the action of the Academy. The profession must be in a lamentable state in New York, if it not only appeals to the public through the columns of daily newspapers, but tamely submits to abuse from the same papers. We are not aware that the scientific proceedings of medical societies are regularly published in the daily papers in any other city of the world except New York. The impropriety of the thing is obvious. The subjects of discussion are frequently such as are not suitable for the public eye, and especially for the perusal of females and children. Gentlemen might often be debarred from reporting unsuccessful cases (often the most instructive), if they are to appear in the columns of a public newspaper; and, finally, the whole thing is an appeal to the public—in other words, *quackery*—and we

wonder that respectable medical men should stand in such awe of the 'press' as to submit to it. We presume the result will be, that those members who desire to meet for improvement will desert the Academy, and frequent other societies whose proceedings are only reported in regular medical journals."

The *New Jersey Reporter* speaks out in still stronger language. But we have already occupied too much of your valuable space. Let us hope that, with the new regime, a better order of things may be inaugurated. We are the friends of the Academy, "though we thus speak." In conclusion, we would say, Gentlemen Fellows, reform your ways, sustain the dignity of our high calling, *leave advertising to quacks*, and better days are in store for you.

CONNECTICUT.

FOREIGN CORRESPONDENCE.

LONDON.

NOVEMBER 7, 1860.

Nov. 6, last evening, Dr. McWilliam read a paper by PROF. SIMPSON before the Epidemiological Society, on *Notices of the appearances of syphilis in Scotland in the last years of the fifteenth century*. After noticing the various opinions as to the time of the first appearance of syphilis, the writer took it as a settled fact that the disease was first recognised in Italy, about 1494-5, at the invasion of Charles VIII. of France, and was seen in its most marked form at Naples. The disease spread northward on the return of Charles's army, and soon made its appearance among the Swiss and Germans, and finally reached Scotland. An edict of the Town Council of Aberdeen, in relation to those infected, was issued in 1497, and that of Edinburgh soon after. Many quotations from writers of that period, as well as official documents, were given, showing the nature of the disease. It appears that James IV., then on the throne of Scotland, had some knowledge of medicine and surgery, and even practised the latter branch. From the entries in his expense book it seems that he was accustomed to pay his patients for submitting to his treatment. The deductions of Prof. S. are that, *first*, from the interest manifested in this disease it must have been unknown before; *second*, if syphilis was first known in Britain at this period, it is not a species of gonorrhoea or leprosy, both of which were well known in this country prior to that date; *third*, its mode of propagation was supposed to be by means of clothing, baths, and even by the breath, but not by sexual intercourse, which was even recommended for its cure. An interesting discussion followed, in which Dr. Copland and Dr. Babington participated.

Medical News.

APPOINTMENTS.

ST. VINCENT'S HOSPITAL.—Dr. P. J. CLARKE, as Attending Physician, in place of Dr. Murray, who has been appointed Consulting Physician.

MARRIAGES.

SHRADY—LEWIS.—At the Church of the Incarnation, N.Y., on Wednesday, Dec. 19th, GEORGE F. SHRADY, M.D., Associate Editor of the "American Medical Times," to Miss MARY LEWIS, of Ulster Co., N.Y.

DEATHS.

BRINSMADE.—At Troy, N.Y., on Tuesday, Dec. 11, of consumption, JANE ELIZABETH, only daughter of Dr. Thomas C. and Elizabeth Brinsmade.

ACADEMY OF MEDICINE.—During the year the following gentlemen have been elected Honorable Fellows:—Dr. MATTHEWS SPALDING; Dr. ELI IVES, Sr.; Dr. REUBEN MESSEY; Dr. RENE LAROCHE; Dr. WM. GIBSON. As non-resident Fellows:—Dr. HENRY VAN ARSDALE; Dr. C. A. LEE;

Dr. FRANCIS BERGER; Dr. F. CAMPBELL STUART; Dr. F. M. JOHNSTON. The following resident Fellows have affixed their names to the constitution:—Dr. J. S. THEBAUD; Dr. WM. R. DONAGHE; Dr. ROBT. RAY, Jr.

From the annual report of the trustees, it appears that the total amount of building fund in their hands is \$4001 42, of which \$2500 is invested on bond and mortgage at seven per cent. interest, and the balance deposited in different savings banks. The treasurer, Dr. J. O. Pond, reports that the receipts of the Academy during the last financial year have amounted to \$998 74, in addition to which there was a balance on hand at the time of the last annual report of \$433 67, making an aggregate amount of \$1433 41. Of this amount, \$200 has been added to the building fund. This sum, with bills paid for printing and for current expenses of the Academy, and bills already audited and remaining unpaid, will leave \$233 30 in the treasury of the Academy at the present time.

PSYCHOLOGICAL JOURNAL (London).—This excellent quarterly periodical, devoted to the interests of psychological medicine, is about to commence a new series, under the title of THE MEDICAL CRITIC AND PSYCHOLOGICAL JOURNAL, and enlarged to 200 pages. A series of Essays are announced on the present and prospective condition of the medical profession, in its moral, social, political, literary, and scientific relations. This Journal is the private property of its distinguished editor, Dr. FORBES WINSLOW.

THE YEAR-BOOK OF THE NEW SYDENHAM SOCIETY.—The first volume of this series just issued, meets with universal condemnation at the hands of the London reviewers.

OX GALL IN FROST-BITE.—Assistant Surgeon John Moore, of Camp Scott, Utah, states that he has employed fresh ox gall with great benefit, where the injury is superficial; it is applied as a liniment, or by pieces of lint saturated with it.—*Army Reports.*

TO CORRESPONDENTS.

Lectures and papers are on file from Dr. JAMES R. WOOD; Prof. AUSTIN FLINT; Prof. B. F. BARKER; Prof. A. K. GARDNER; Dr. LEWIS A. SAYRE; Dr. W. H. CHURCH; Dr. WM. M. THOMSON; Dr. J. BARRY THOMPSON; Dr. NELSON S. DRAKE.

An Appeal to Country Practitioners.—Can you not draw out more of our country practitioners? There are many men in practice, in country towns, of sound judgment, great practical tact, and, withal, ready writers. Such should be prevailed upon to write more for medical periodicals. Diseases in the country differ greatly from those in the city, and again the same disease varies much in different localities. Now, one of the highest sources of profit which a weekly periodical opens to the profession, is this free and constant interchange of opinion which it establishes among medical men widely separated. I desire to see more country practitioners avail themselves of such advantages.

GREENE, CHEYENGO Co., N. Y., Dec. 14.

A. W.

[We cordially approve of the suggestions of A. W., and beg to commend them to the serious consideration of an Ex-President of the State Medical Society, who, though a country practitioner, never fails to interest and instruct when he contributes his experience and opinions to Medical Journals. We should be pleased, and especially at this time when diphtheria and other epidemic diseases are prevailing widely, to receive communications from country physicians, in all parts of the country, relating to prevalent or other diseases. The great attraction and highest recommendation of a weekly periodical are that it may and should be the medium of a constant and rapid interchange of the opinions and the experience of medical men widely scattered.]

Mortality of Chicago.—By calculation, based upon the last census, I find our ratio of mortality in this city to be as one to fifty-eight for the last two years. More than five-ninths of the whole number of deaths occur among children of five years and under. How much better are these figures than those of New York, Philadelphia, Boston, etc.? Can you give us the comparison? We count from October 1st, 1855, to October 1st, 1860.

CHICAGO, Dec. 12th, 1866.

H. W. JONES, M.D.

At What Age does a Professor become Incompetent to Teach?—I would like to ask "Inoc," at what age a medical man becomes unable to keep pace with the improvements of the age, and what is that "somewhat advanced age" at which Professors in our medical colleges are no longer competent to instruct classes in the latest improvements in the medical sciences? This assertion has a very wide application, and, I for one, should be glad to know about the age designated. Your correspondent feels badly, but he has felt so for a year or two.

December 15.

W. A.

Diphtheria in Onondago, N. Y.—We look forward with much interest to Prof. CLARK's promised lectures on diphtheria. This frightful disease is prevailing at present in our city. Several of our most prominent and wealthy citizens have lost children by it during the last few days. If there is a remedy, for Heaven's sake let us have it.

OSWEGO, N. Y., Dec. 14, 1866.

F. E.

Is Calomel ever Useful?—A reviewer of Dr. Holmes, and an ardent admirer of the whims of that medical wag, in the Charleston Medical Journal, asks:—"Let any intelligent and candid physician of large experience ask himself the question, what positive good can you affirm has, in your practice, followed the administration of calomel? and he will find it, we venture to predict, by no means an easy one to answer." The fools, among medical writers at least, are not all dead yet, it seems. It is truly astonishing, that any man, who has had any experience at the South, in the treatment of acute diseases, could venture such a stupid assertion, in a respectable Journal. I will, on another occasion, answer that question.

CHARLESTON, S. C., Dec. 1, 1866.

COMMUNICATIONS have been received from:—

Prof. S. D. GROSS, Pa.; Dr. S. R. PERCY, N. Y.; Dr. WM. MASON TURNER, Va.; C. T. EVANS, N. Y.; Dr. IGNATIUS LANGER, Iowa; Dr. WILLIAM O'MEAGHER, N. Y.; Dr. S. D. WILLARD, N. Y.; Dr. A. N. BELL, N. Y.; Dr. JOHN G. MEACHEN, N. Y.; Prof. P. A. JEWETT, Ct.; Dr. J. G. ADAMS, Ct.; Dr. THOMAS C. BRINSMADE, N. Y.; Dr. WM. K. CLEVELAND, N. Y.; Prof. EDWARD WARREN, Md.; Dr. JAMES E. REEVER, Va.; Dr. F. EVERTS, N. Y.; Dr. A. WILLARD, N. Y.; Dr. NELSON S. DRAKE, N. Y.; Dr. RICHARD S. COOLIDGE, D. C.; Dr. JAMES R. BIRD, N. Y.; Dr. WM. H. JONES, Ill.; Dr. J. S. KAYMOND, Mich.; Dr. J. M. GAZZELL, Va.; Dr. A. ALLEN, N. Y.; Dr. A. H. POWELL, Va.; Dr. P. A. JEWETT, Conn.; Dr. R. G. BOGUE, Ill.; Drs. SAMUEL and YANTIS, Ky.; Dr. W. J. MC CAINE, Texas; Dr. J. A. YEDDELL, N. Y.; Dr. G. H. BARTON, Vt.; Dr. H. W. SMITH, N. Y.; Dr. A. A. DOTT, Vt.; Dr. G. CAULIER, S. C.; Dr. J. B. THOMPSON, N. Y.; Dr. J. EMMERSON, N. H.; Dr. W. B. ATKINSON, Pa.; Dr. J. P. PHILLIPS, Conn.; Dr. B. H. STONE, Vt.; Dr. W. L. PECK, O.; Dr. J. LAMB, Ind.; Dr. L. DAVENPORT, Mich.; Dr. G. HEATON, Mass.; Dr. F. CUNNINGHAM, Pa.; Dr. W. H. DEAN, N. Y.; Prof. A. T. WOODWARD, Vt.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

From the 8th day of December to the 15th day of December, 1866.

Deaths.—Men, 75; women, 97; boys, 102; girls, 98—total, 372. Adults, 178; children, 200; males, 177; females, 195; colored, 10. Infants under two years of age, 147. Among the causes of death we notice:—Infantile convulsions, 27; croup, 14; diphtheria, 18; scarlet fever, 24; typhus and typhoid fevers, 2; consumption, 56; small-pox, 4; dropsy of head, 12; infantile marasmus, 18; inflammation of brain, 9; of lungs, 29; bronchitis, 7; congestion of brain, 18; of lungs, 5; erysipelas 3; hooping cough, 2; measles, 1.

Dec.	Barometer.		Out-door Temperature.			Difference of dry and wet bulb. Therm.		General direction of Wind.	Mean amount of cloud.	Rain.
	Mean height.	Daily range.	Mean.	Min.	Max.	Mean.	Max.			
	In.	In.	.	.	.	.	.		0 to 10	In.
9th	30.07	.07	28	21	36	4	6	W.	2	
10th	29.70	.54	33	30	27	3	2	SW.	10	
11th	29.71	.31	33	25	41	5	8	SW.	8	
12th	29.70	.30	30	25	36	4	6	S.W.	7	1.04
13th	29.74	.31	30	20	40	5	8	S.W.	1	
14th	30.31	.50	15	9	22	3	4	N.W.	0	
15th	30.34	.31	18	9	16	3	8.5	N.E.	9.9	

REMARKS.—9th, Cloudy late P.M.; 10th, snow, hail, and rain after 9 A.M. 11th, clear P.M., wind fresh; 12th, clear P.M.; 13th, wind fresh, and cold P.M.; 14th, wind fresh all day; 15th, wind fresh A.M. [Note.—When the outdoor temperature is below 32 degrees the degree of evaporation is determined in an open room kept slightly above the freezing point.]

MEDICAL DIARY OF THE WEEK.

Monday, Dec. 24.	NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M.
	BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
Wednesday, Dec. 26.	EYE INFIRMARY, Diseases of Eye, 12 M.
	EYE INFIRMARY, Operations, 12 M.
Thursday, Dec. 27.	NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M.
	BELLEVUE HOSPITAL, Dr. Sayre, half-past 1 P.M.
Friday, Dec. 28.	N. Y. PATHOLOGICAL SOCIETY, half-past 7 P.M.
	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
Saturday, Dec. 29.	NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M.
	BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M.
	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
	BELLEVUE HOSPITAL, Dr. Church half-past 1 P.M.
	EYE INFIRMARY, Diseases of Eye, 12 M.
	BELLEVUE HOSP., Dr. Wood, half-past 1 P.M.
	OPHTHALMIC HOSPITAL, Drs. Stephenson & Garrish, 1 P.M.
	NEW YORK HOSPITAL, Dr. Smith, half-past 1 P.M.
	EMIGRANTS' HOSP., WARD'S ISLAND, Dr. Carnochan, 3 P.M.
	EYE INFIRMARY, Diseases of Ear, 12 M.

SPECIAL NOTICES.

BELLEVUE HOSPITAL.—On Saturday (this day), December 22, Dr. JAMES R. WOOD will operate in a case of necrosis, and continue his course on Operative Surgery.

BELLEVUE HOSPITAL.—On Wednesday, December 26, Dr. LEWIS A. SAYRE will lecture on Diseases of the Knee-Joint.

Original Lectures.

CLINICAL LECTURES.

DELIVERED AT THE N. O. CHARITY HOSPITAL

BY AUSTIN FLINT, M.D.,

PROF. OF CLINICAL MEDICINE AND MEDICAL PATHOLOGY, IN THE N. O. SCHOOL OF MEDICINE.

LECTURE II.

ON PULMONARY EMPHYSEMA.

(Concluded from page 898.)

Cause of the Dilatation of the Air Cells.—Theories of Laennec and Gairdner.—Relations of Asthma and Emphysema.—Treatment of Emphysema.

GENTLEMEN:—I wish, in this lecture, to say a few words respecting the pathology, or more properly the pathogenesis or mode of production, since emphysema is probably to be considered as a lesion incident to other affections, rather than in itself a substantive disease.

The essential anatomical condition we have seen to be dilatation of the air cells. Now, what causes this dilatation? What is the mechanism of its production? These questions are open for discussion. They have not been conclusively answered. In the place of settled answers we have discrepant theories. This is perhaps not surprising, when it is considered that the anatomical condition was first ascertained and described by Laennec, within the last half century. Laennec offered an explanation of the manner in which the cells become permanently dilated, and pathologists have generally accepted his explanation, although it will hardly bear criticism. Recent microscopical researches by Mr. Rainey, of London, appeared to show that fatty degeneration of the cell walls, preceding the dilatation, leads to it by impairing the elasticity of the organs, and sometimes causing destruction of more or less of the walls and coalescence of the cells. Still more recently, Dr. Gairdner, of Edinburgh, has submitted a theory, which, to say the least, is extremely ingenious and plausible. I will endeavor to give very briefly the theory of Laennec and that of Dr. Gairdner, but without discussing either, which would occupy too much time. My object is simply to place before you theoretic views with respect to which opinions are divided, in order that you may, if you choose, bring to bear upon them your own powers of reasoning and investigation. Here is one among the multitude of subjects of pathological inquiry which remain to be cleared up to the satisfaction of all minds.

There is one fact to be premised which undoubtedly has an important bearing on the genesis of emphysema. In the vast majority of cases, the lesion is preceded and accompanied by chronic bronchitis. The exceptions to this rule, if any exist, are extremely rare. So commonly associated as are these two affections, it is fair to conclude that they are in some way pathologically connected, and as the bronchitis generally, if not uniformly, precedes the emphysema, it is probable that the former is involved in the development of the latter. Laennec observed this connexion, and accounted for the dilatation of the cells by supposing that certain of the smaller bronchial tubes becoming obstructed by tenacious, thick mucus, an accumulation of air, and thereby distension, occurs in the air cells connected with the obstructed tubes. Regarding the act of inspiration as more powerful than the act of expiration, he thought that air was forced into the cells behind the obstruction by the former act, and that the latter act was unable to expel it. I have said that the theory of Laennec will hardly bear criticism. The expiratory act in forced breathing is much more powerful than the act of inspiration; hence, it is not reasonable to suppose that air will pass by a bronchial obstruction in inspiration and not in expiration, but pre-

cisely the reverse would be expected to take place. Moreover, with regard to the obstruction of the tubes by plugs of mucus, when we consider that the tubes form a series of branching cylinders constantly diminishing in calibre, the effect of the expiratory acts in breathing and coughing must be to promote the passage of the plugs onward from the smaller to the larger tubes, and therefore, the obstruction would be likely to be less to the current of air from the cells than to the current into the cells.

Dr. Gairdner regards the dilatation of the cells as due to obstruction of the bronchial tubes. But he refers the seat of the lesion to cells connected with unobstructed bronchial tubes, not to those situated behind the obstruction. He supposes that, as an immediate effect of obstruction from mucus impacted in the smaller tubes, collapse, more or less, of the pulmonary lobules is liable to take place; an effect precisely the reverse of that which Laennec imagined. The air in expiration and in the violent expiratory efforts in coughing, according to Dr. Gairdner's theory, passes by the obstructing mucus; and this obstructing mucus, moved from the smaller to the larger tubes by the expiratory current in breathing and coughing, is again drawn backward into the smaller tubes by the inspiratory current of air, and thus operates like a ball valve preventing the entrance of air into the cells. In this way collapse occurs of lobules in immediate relation to the obstructed tubes. I shall have occasion, in treating of other subjects, to refer to the occurrence of collapse as thus explained, irrespective of its occurrence antecedently to emphysema. We shall see that the so-called lobular pneumonia of children is, in fact, not a form of pneumonia, but bronchitis with collapsed lobules. But not to digress from our present subject, how, you will ask, does collapse of more or less of the lobules of the lungs give rise to emphysema? The volume of breathing capacity of the lungs being diminished in proportion to the number of collapsed lobules, the non-collapsed portions are dilated by the augmented inspiratory movements, or in other words, by atmospherical pressure. The enlarged volume is thus supplementary to the loss of portions of the lung structure as regards the respiratory function. Dr. Gairdner sustains his theory, not only by reasoning, but by facts obtained by direct observation. I cannot, however, do more than merely present his theory. You will find his views enunciated and advocated by himself in a paper contained in the *British and Foreign Medico-Chirurgical Review* for April, 1853. I refer you to this paper, as his small treatise on the subject has not been republished in this country. I would advise you to read the article referred to, which you will find extremely interesting. I am not prepared to say that I believe Dr. Gairdner's theory to be fully adequate to account for the production of emphysema, but, if called upon to decide between it and the theory of Laennec, I could not hesitate to give it the preference.

With respect to Mr. Rainey's researches, Dr. Gairdner denies that the air cells in emphysema present, under the microscope, a greater abundance of fatty granules than are often found when the cells are not dilated. This is a point to be settled by further researches. If the cell walls do become attenuated and to a greater or less extent destroyed by fatty degeneration, as claimed by Mr. Rainey, or by any other morbid process, this must be considered as having an important bearing on the development of the affection under consideration.

An interesting point of inquiry connected with the subject of the development of emphysema, is its relationship to asthma. The latter affection will claim distinct consideration in my clinical course, as illustrative cases in the hospital come under our observation. A confusion appears to exist in the minds of many with respect to the two affections, asthma and emphysema. The author of a late work on diseases of the chest, speaks of them as one and the same affection, and calls an attack of asthma a paroxysm of emphysema. The two affections are generally associated, but they are by no means always associated. In the case which has suggested this lecture, the emphysema existed

independently of asthma. On the other hand, I have repeatedly met with cases of asthma without any of the signs of emphysema; but sooner or later, it is true that the latter affection usually, if not always, becomes developed. The affections are quite different in their pathological character. Asthma is a spasmodic affection of the muscular fibres, entering into the composition of the smaller bronchial tubes. Spasm of these muscular fibres contracts the tubes and obstructs the passage of air into and from the air cells. It is a curious fact that these muscular fibres appear to be insusceptible to spasmodic action in most persons, and are peculiarly susceptible in certain persons. The latter are alone capable of becoming afflicted with asthma. It is a still more curious fact that some persons are so constituted that spasm of these muscular fibres is occasioned by the introduction, with the atmospheric air, of substances which to most persons are perfectly innocuous. Thus, we find persons who, from an idiosyncrasy pertaining to the bronchial tubes, suffer from asthma when they inhale emanations from feathers, powdered ipecacuanha, and other substances. Like other spasmodic affections, asthma is essentially paroxysmal. It occurs in paroxysms which are more or less frequent in their recurrence and have a variable duration, sometimes only arising when produced by some obvious local exciting cause. Emphysema, on the other hand, is a lesion, viz. permanent dilation of the air cells; and, as we have stated, it may or may not be associated with asthma.

The frequent co-existence of these two affections, however, renders it altogether probable that there does exist between them some bond of relationship. What is the nature of the connexion? I believe that the link which binds them together is chronic bronchitis extending to smaller tubes than are involved in ordinary cases of inflammation of the bronchial mucous membrane, but, of course, not affecting the minute tubes to an extent to constitute the disease called capillary bronchitis. In persons subject to asthma, a paroxysm is generally incident to an attack of bronchitis; or, if the latter be habitual, either to an increase of the bronchial inflammation or its extension to smaller tubes. It is extremely rare for asthma to occur without bronchitis, although cases of what has been distinguished as pure nervous asthma are occasionally met with. In such cases, very rarely, if ever, is asthma associated with emphysema. Bronchitis affecting the smaller tubes in a person who has an asthmatic diathesis, develops the susceptibility to the spasmodic action which constitutes asthma; the same bronchitis becoming chronic, is likely to lead, sooner or later, to emphysema. The asthma *per se* does not give rise to emphysema, nor does the emphysema give rise to asthma, but the bronchitis stands to each in a causative relation.

I have but little time left for remarks on the treatment of emphysema, but I can embrace all that I wish to say now under this head in a few words.

The lesion which constitutes the affection is generally regarded as irremediable, and hence, it is only hoped by judicious treatment to prevent or retard its progress. We cannot, indeed, expect to effect a cure, but an amount of improvement sometimes takes place which shows that there is an approximation to a cure. In a case which was under my observation, some years ago, the affection existed to such a degree that the characteristic deformity of the chest was marked; this patient has so far recovered that he suffers comparatively little, and the deformity of the chest is nearly gone. We should not despair in all cases of placing patients in a far better condition than that in which we find them when they come to us for treatment.

The great object of treatment is to relieve, and, if possible, to cure the bronchitis, which, as we have seen, stands to the emphysema in the relation of causation. The good which we shall be able to do, will be commensurate with our success in treating the associated bronchitis. Now, with reference to this object, different remedies will be suited to different cases. But I have found two remedies

to possess, in certain cases, a remarkable efficacy. I shall content myself with suggesting these, and, in fact, they are the only remedies of the efficacy of which I can say much from my own experience. One of these remedies, and I am inclined to think the more efficient of the two, is the iodide of potassium. In the case just alluded to, in which the improvement was so remarkable, it was manifestly effected by means of this remedy. The patient took it in doses of five grains, three times daily, until he was so much benefited that he ceased to come and report his condition; but finding that when the remedy was suspended, the bronchitis and want of breath returned, he continued to take it of his own accord, with but little intermission for a year. This was several years ago, and, in the meantime, he has had tolerable health, but he finds it necessary, as he recently informed me, from time to time to resort to the remedy on which his experience has taught him to rely confidently for relief. I have known marked relief in other instances, but you must not expect great results in all cases, and sometimes it will fail to afford any benefit. There are some persons, by the way, who cannot take this remedy. I have known it repeatedly to produce a pustular eruption on the skin; but this is only a trivial inconvenience. It sometimes occasions an intolerable dryness and disagreeable sensation in the fauces, and in a patient who was long under my observation, it produced the effects of an acid poison, exciting severe and protracted vomiting.

The other remedy is the chlorate of potassa. I have prescribed this remedy repeatedly in cases of emphysema during the last two or three years, and, in several instances, it has proved highly useful by relieving the associated bronchitis. Its usefulness was strikingly apparent in a case under observation in my wards in this hospital winter before last. I prescribed this remedy in the case which has just terminated, but from the patient's condition, I did not expect real benefit from this or any remedy. From two to four drachms of the chlorate of potassa may be given during the twenty-four hours. Perhaps a larger quantity may be borne, but I have never exceeded half an ounce.

It is very probable that other remedies may be as useful, in certain cases, as the two which I have mentioned. Other remedies, perhaps, may be efficacious in cases in which these fail to prove beneficial. I repeat, that I mention these only because I cannot advocate other remedies from my own experience.

The importance of early treatment in cases of emphysema is very great. There is reason to believe that, judiciously treated before much progress has been made in the dilatation of the air-cells, it may, to say the least, be often kept within bounds compatible with comfortable health. With reference to early treatment, the diagnosis is important. And in order to make the diagnosis, the practitioner must be competent to avail himself of the information to be obtained by physical exploration of the chest. Owing to the too common neglect of auscultation and percussion, the affection is often not ascertained at a period when judicious treatment would be immensely important to the patient. In fact, it is not uncommon for emphysema to be confounded with other affections, even when it has advanced to such an extent that nothing can be plainer than the physical signs which denote its existence. With the aid of physical exploration, the diagnosis rarely presents much difficulty, as I hope to show you on other occasions.

I would remark, in conclusion, that in treating of the subject in this lecture, I have had reference exclusively to the common form of pulmonary emphysema, sometimes distinguished as true or vesicular emphysema. A rare variety, known by the name of interlobular emphysema, differs in its seat and pathological character. In this variety, air is extravasated into the areolar or connective tissue, uniting together the lobules and the pleura to the pulmonary organs. This variety is, in fact, identical with ordinary emphysema of the subcutaneous areolar structure, to which it may give rise, the air finding its way along the roots of

the lungs, and diffusing itself more or less over the body. It would be an improvement in nomenclature if the term emphysema could be limited to this variety, and the common form, true or vesicular emphysema, were to receive some other title. It is sometimes called rarefaction of the lungs. A simpler and better denomination is dilatation of the air-cells, which expresses the special lesion constituting the affection.

Original Communications.

REMARKS ON

EXSECTION OF THE SUPERIOR MAXILLA,

WITH THE REPORT OF A SUCCESSFUL OPERATION.

By J. HARRY THOMPSON, M.D.,

OF NEW YORK.

At an early period, this operation was spoken of as one which might possibly be performed for various diseases of the Highmorian cavity, with good prospects of success. Even as far back as 1693, we find record of a successful partial removal of the superior maxillary bone, by Akolthua, of Breslau. To whom the credit rightly belongs of having, in modern times, introduced the operation to the special notice of the profession is a matter of some doubt. M. Paillard claims that honor for Dupuytren, and insists that he performed the operation in 1819, and again in 1824; but this is distinctly denied by M. Gensoul, who, upon the authority of Sanson and Penil Grandchamp, both of whom were present, and assisted at the operations spoken of, shows that the whole jaw was not removed in either case, and that Dupuytren merely followed the previous operations of Desault. The first well authenticated account of an entire removal of the upper jaw was by Gensoul, of Lyons, in May, 1827. After this, it was attempted, in December of the same year, by Lizars, for a sarcomatous tumor of the antrum, in a miner. But he was compelled to abandon the operation on account of the hæmorrhagic condition of the gum and palate of his patient; for, although he had taken the precaution to tie the common carotid artery of the affected side, the man lost upwards of two pounds of blood in a few seconds. On August 1, 1829, Lizars performed his second operation; the tumor was medullary sarcomatous; he was successful so far as the operation was concerned; but unfortunately his patient died on the nineteenth day after its performance. His third operation for the same disease was on the 10th of January, 1830; the patient a female; age not given. This time he met with complete success; the woman being able to walk about her ward on the eighth day, leave for an airing on the thirtieth day, and was discharged from the hospital, cured, on the 5th of March following. Dr. Thomas White relates a very interesting case, in his own *Cases in Surgery*, of a woman "afflicted with a tumor betwixt the zygomatic process and the nose, arising from the lower part of the orbit of the left eye. It pressed the nostrils to one side, so as to stop the passage of the air through them, and thrust the eye out of its orbit, so that it lay on the left temple. Notwithstanding this, however, the function of sight was unimpaired. The tumor occupied the greater part of the left side of the face, extending from the lower part of the upper jaw to the top of the forehead, and from the farthest part of the left temple to the external canthus of the eye. It had an unusual and unequal bony hardness, was of a dusky, livid color, with varicose veins on the surface; and there was a soft tubercle projecting near the nose, where nature had endeavored in vain to relieve herself." After the removal of this mass, the dura mater and vessels of the brain were apparent to the eye and touch. . . . The patient

recovered. The eye returned to its place, and the patient enjoyed the perfect sight of it. For the interesting details of this operation, I must refer to the Doctor's own work, *Cases in Surgery*. I am not aware of any other case on record, in which the patient recovered after such extensive mischief had been done by disease of the antrum.

Syme, Liston, Fergusson, O'Shaughnessy, and many other eminent surgeons of Europe have repeatedly removed the superior maxilla and malar bones of both sides with complete success; and many of our prominent surgeons in the United States have not been behind their European brethren either for their boldness or success in this particular operation. At the head of the list stands the father of American surgery, Dr. Valentine Mott, with most of whose operations the majority of the profession are familiar; and those who are not, I must refer to the Doctor's reports, as the list would be much too long for insertion here.

Dr. Willard Parker has repeatedly removed both of the upper jaws, and in one instance half of the lower jaw besides, with perfect success in those cases which have been of a benign character. The following three cases, however, which are of a malignant type, have not proved so satisfactory; they are reported from the Doctor's private notes:—

Case 1.—James B., aged 29, from New Jersey, April, 1844. He had a soft elastic tumor of the left side of the face; the teeth were loose, and a portion of the wall of the antrum was absorbed. The left nostril was obstructed, and there was a fetid discharge. The general health was unimpaired. He knew of no exciting cause; the swelling had been there some months. Dr. Parker advised the removal of the superior maxilla, to which operation the patient agreed to submit. The superior maxilla, malar, and half the ethmoid of that side were taken away. The wound soon closed, and in a few days he was able to be out, but in the course of four months the disease returned, and at the end of nine months he died.

Case 2.—Miss Mary B., aged 38. Cancer of the right jaw, operated upon, November 15, 1845. The disease returned, and the patient died four months afterwards.

Case 3.—Mr. Delmonico, aged 76. Cancer of the upper jaws; they were removed October 10, 1859; patient died April 10, 1860, living exactly six months.

Doctor Detmold has operated several times for different diseases of the upper jaws, with varied results, but unfortunately he has preserved no notes.

Doctor Carnochan has three times tied the common carotid artery for encephaloid disease of the antrum, but without any good result; twice he has removed the bone for the same disease, unsuccessfully. Three times he has extirpated the superior maxilla and os malar for true osteo-sarcoma; in each case the patient recovered, and the disease did not return. It must be remembered that Dr. Parker's three unsuccessful cases were not osteo-sarcoma, but osteo-cancer; hence the reason for such different results as compared with those of Dr. Carnochan.

Most authorities who recognise osteo-sarcoma as a non-malignant disease will admit the operation for its removal, when situated in the upper jaw, equally justifiable with that for fibrous tumor or caries, and although extensive and attended with considerable risk, few surgeons would hesitate to perform it when indicated in either of the above diseases. But the majority of cases which are classified as osteo-sarcoma, partake more or less of a cancerous character, hence the reason that many of our eminent surgeons decline to interfere when the disease is situated in the superior maxilla, but will willingly operate if the inferior bone is the seat of the disease. That the risk of the return of a malignant disease, when situated in the upper jaw, is greater than in the lower, we may well understand. In the lower jaw there is no fear of reproduction from any portion of the disease being left in parts connected by continuity; we can disarticulate and completely remove the bone, and unless the soft parts be involved there is comparatively little to apprehend from a return. In the upper jaw we have no such advantage; having to use the saw and cutting pliers to

effect disarticulation, there is a risk of leaving some portion of the diseased bones behind; hence the great need for extreme caution during the operation, that every suspected part may be removed, and the necessity for early and prompt action as soon as the disease is recognised. If due precaution is observed, notwithstanding all the difficulties to be encountered and the risks to be run, I think the statistics will show a better average result than in any other equally extensive operation for malignant or semi-malignant disease—the lower jaw excepted.

The following case is one upon which I operated on the 21st of April, 1860, and which, considering the age of the patient and the advanced stage of the disease, was as unpromising as it well could be:

Mrs. M., aged 67 years, first presented herself for treatment November 6, 1859, suffering from acute inflammation of the lachrymal sac, which being in the suppurative stage, I opened freely, giving immediate relief. The patient had up to that time enjoyed fair health. Some few days subsequently, the acuteness of the attack having subsided, and the parts being in a condition to tolerate careful manipulation, I examined them carefully and thoroughly. Upon facing my patient, I observed the left eye was a line or more higher than the right, and slightly more prominent. Upon the floor of the orbit there were two small tumors, one situated near the external and the other near the internal canthus. I thought I could detect pulsation in the external tumor, but it was not sufficiently distinct to be positive whether it arose from the artery in my own finger or was in the tumor. The left nostril was partially occluded by an unelastic vascular tumor which, by its pressure upon the nasal duct, had caused inflammation of that canal and subsequently of the sac. Upon examining by the mouth, I could find nothing abnormal in any other part of the bones. From this time until the middle of December following, the orbital tumors increased in size, pushing the eye upwards and outwards; again examining by mouth, I found the bone bulging forward above the alveolar process, but to no considerable extent. I made an exploratory puncture of the external orbital tumor, but without detecting fluid; the patient complained of but little pain. I was now perfectly satisfied it was not a simple abscess or dropsy of the antrum. Fibrous tumor was equally out of the question. I therefore concluded I had to contend with a more serious disease, osteo-sarcoma, and so informed my patient, intimating the probable necessity of an operation for its removal. By the latter part of January, 1860, the disease had fully developed itself, giving the cheek considerable prominence, the bone bulging upon its buccal, palatal, and orbital walls. There was a steady pain described by the patient as similar in character to a "gnawing toothache." Shortly after this she was seen by Dr. Markoe, who confirmed the diagnosis of osteo-sarcoma and recommended its removal.

I laid the matter fairly before my patient and her family, informing them of the certainty of a fatal issue to the case if left to itself, of the possible benefit of an operation, and of all its attending risks, especially in a woman of her age, leaving the choice in their own hands, but withal advising its removal. The patient concluded that as she was suffering no extreme pain, she would not submit to the operation. From this time until the middle of April following, the disease increased rapidly, the pain had now become so severe as to deprive her of sleep, and she was failing under the severe constitutional disturbance. She was now urgent in desiring an immediate operation, as the only means of escaping from her present torture. The accompanying sketch was taken on the 19th of April, and will give some idea of her general appearance.

On the 21st of April, at 2 P.M., assisted by Drs. Markoe and Moses, I removed the entire mass, which included the superior maxillary and malar bones and part of the zygoma.

The patient was laid upon a table of convenient height, with her head slightly elevated, and was brought fully under the influence of ether. I made my first incision

from the inner canthus of the eye vertically down through the upper lip. The cheek was next laid open from the temporal fossa to the inner angle of the mouth, and the flap thus formed dissected up as rapidly as possible, turned upon the forehead, and there held by an assistant. The oozing from the cut surfaces of the flap was quickly stopped by the



styptic action of the atmosphere. The only arteries which required a ligature, were the facial and its masseteric branch, the other vessels were restrained by torsion. The diseased bones being now fully exposed, I removed the left central incisor, and with Hey's metacarpal saw divided the alveolar border as far as the palatine process. Then introducing one blade of a strong pair of bone pliers into the left nostril and the other into the alveolar and palatine groove, completed the section of this part. The palatine plate of the palate-bone being involved in the disease, had to be sacrificed. By cross-cutting with an ordinary scalpel the velum palati was separated from the doomed parts. The zygomatic process was next divided with the ordinary bone-pliers—next the outer orbital process of the frontal bone at its transverse facial suture, and lastly, the nasal process of the superior maxilla. The floor of the orbit had been completely absorbed by the disease. On pressing down the mass a portion of the pterygoid process of the sphenoid bone was broken off. The few remaining connexions to the soft parts were readily divided, and the diseased bones removed. In the deep part of the cavity, immediately behind that portion of the pterygoid process which had been broken off, the internal maxillary artery could be seen pulsating; but in its lower portion, it was surrounded by a very suspicious-looking mass, in removing which the artery was ruptured, but being immediately secured gave no annoyance. After a careful examination of the parts, and trimming off some sharp points of the bones, the flap was brought down and retained in apposition to the corresponding parts—the outer cut by silver pins and twisted suture, and the inner one by simple interrupted silk suture—the object being to test which of the two methods was most satisfactory. The cavity was filled with fine shreds of lint, the patient removed to her bed, and left to recover from the effects of the ether. During the operation, the mouth was kept free from blood, by being continually cleansed with small pieces of sponge, tied on pieces of cane for handles; with this precaution, against suffocation, there seems to be no sufficient reason for not giving ether in all operations upon the jaws. At 9 P.M. I again visited my patient; found her comfortable, complaining of no pain; had slept some three hours; pulse, 96; but the circulation in the flap was very unsatisfactory, and I had some fear that it might slough; ordered clothes wrung out of hot water to be kept applied to the parts during the night; gave some wine and water and 10 grs. pulv. Doveri. Next morning the case looked somewhat better; there was a little warmth in the flap; patient was cheerful and had passed a good night; suspended the hot

cloths, and applied some cotton batting over the cheek; pulse 100, feeble; ordered nourishing diet, and quina sulph. grs. ij. three times a day, two ounces of sherry wine with each dose of the quina. From this time everything progressed favorably. *April 26th.*—I removed the sutures; the whole extent of the wounds having united by first intention, it was impossible to decide in favor of either form of suture, as each had done equally well.

The discharge from the inner surface being offensive, I removed the lint and introduced fresh, having previously soaked it in a weak solution of the chloride of soda. The whole extent of the inner surface presented a healthy appearance; pulse 84, and of a fair character; stopped the quina, but continued the wine; she could swallow well. On the 13th day she was able to walk about her room; suffered no pain; slept well and had a good appetite; pulse 80, and of good character. I again removed the lint and introduced no more, but ordered the cavity to be frequently syringed with a solution of the chloride of soda. On the 28th of May she left home on a visit to some friends in the upper part of the city, and on the following Monday she walked from her house to the College of Physicians and Surgeons, a distance of about one mile, to show the result of the operation to the students who had seen her previous to its performance; she walked home again with perfect ease. By the early part of July, the parts being sufficiently hardened, Mr. Fisk, dentist, of Bleecker street, made her a partial set of teeth, with an entire palate, completely filling up the roof of the mouth as far as the velum; this was retained in position by an air chamber on the sound side, and clasps to the teeth. As a matter of course it was useless for any purposes of mastication, but it restored the articulation perfectly, and very much improved the appearance of the patient, of whom this sketch was taken shortly after.



She was now able to attend to her ordinary domestic duties with more comfort to herself than the majority of females of her age.

As to the probability of a return of the disease in this case, considering its advanced stage before removal, its unquestionable malignant character, as revealed by the microscope, I can hardly expect anything else; and supposing such to be the case, it militates nothing against the justifiability of the operation; for, at the lowest calculation, my patient has gained some months of life, with perfect freedom from pain, and a fair prospect of its still longer continuance; and that is certainly as much as we can hope for after the removal of cancerous disease in any part of the body.

I have used the term osteo-sarcoma in this case, as it is the one by which this disease is more generally known, but I believe osteo-cancer would be a better title, as the former has been applied as often to non-malignant diseases, such as spina ventosa and fibrous growths in the cavity of bones, as to those of a more serious and malignant character.

Reports of Hospitals.

BELLEVUE HOSPITAL.

A CASE OF PNEUMONIA TREATED BY STIMULANTS.

[Reported by WM. C. FERGUSON, M.D., House Physician.]

BRIDGET M., *æt.* 35, was admitted into the Hospital Nov. 23, 1860, giving the following history:—Some two or three days before applying for admission, while suffering from a cold and cough, was exposed to very inclement weather, soon after she was seized with a chill, followed by fever; the cough increasing and being accompanied by bronchitic expectoration. When admitted was feeble, with dull heavy expression of countenance, not readily comprehending questions addressed to her, cheeks flushed, skin dry and hot; tongue coated with dark yellowish fur, along the dorsum, edges deep red; pulse 120; had had no evacuation from the bowels for a week.

On examination of the chest, nothing abnormal could be detected anteriorly, but percussion revealed a little dulness about midway of the vertebral border of the scapula, over the left lung, which was rather relative than absolute. On auscultation nothing abnormal could be heard during ordinary breathing, but on a full inspiration, bronchial respiration could be recognised over the points of dulness. No crepitus present. At this time there was but little expectoration, and this was white and frothy.

Treatment.—Was ordered dry cuppings over the region at which pneumonia was detected, to be followed by oiled silk jacket, for purpose of promoting diaphoresis; also

R.—Spts. nit. dulc. $\frac{3}{j}$.

Spts. minderer. $\frac{3}{j}$.

Dose—tablespoonful every two hours.

Nov. 24.—Dulness marked, but very circumscribed. Constitutional disturbance out of all proportion to the amount of lung tissue involved; bronchial respiration only heard on full inspiration. Pulse 130, weaker than on yesterday; tongue dry and red; was delirious during the night.

Dry cupping to be repeated, also to take $\frac{3}{ss}$. whiskey in form of milk punch every two hours—beef tea *ad libitum*. As an expectorant, the following:

R.—Ammon. carb. $\frac{3}{ij}$.

Tinc. Sanguinar.

Syr. Bals. Tolut. *aa* $\frac{3}{j}$.

Dose—teaspoonful: two at intervals of two hours, alternating with the above.

Nov. 25.—Patient delirious. Pulse 140; respirations 50; dulness extending; bronchial respiration and bronchophony very distinct. Stimulus increased to $\frac{3}{ss}$. every half hour, with free use of beef tea. 26.—Pulse 120. Sputa very viscid, and has now become rusty colored—continued treatment.

27.—Pulse 108, fuller; physical signs remain unchanged.

28.—Pulse 100.

29.—Dulness not so marked; less bronchial respirations.

Dec. 1.—Pulse 96; tongue moist, with thin coating of whitish fur, air enters lung more readily. Dec. 3.—Pulse 88, continued treatment for to-day. Dec. 4. Stimulus reduced $\frac{3}{ss}$. every 3 hours, beef tea freely taken—respiration becoming soft and breezy, rapidly improving.

Dec. 7.—No dulness—no bronchial breathing and but little cough. Dec. 8.—Soon be able to leave the Hospital.

NURSERY AND CHILD'S HOSPITAL.

PNEUMONIA AND COLITIS, SEQUELÆ OF THE SUMMER COMPLAINT.

The child, whose case is related below, fell a victim to the pathological changes induced by the summer complaint. The points of interest are the following: First, the extreme

emaciation and protracted cough, without the presence of tubercles. The autopsies made at this institution show that tubercular deposition is not of common occurrence in this disease, however protracted the case may be, or great the emaciation. Secondly, the presence of pretty extensive pneumonia, with no appreciable change in the respiration, and with only a slight though persistent cough. Thirdly, the condition of the *primæ viæ*.

Case.—A female infant, twelve months old, was admitted into the hospital in the latter part of September, emaciated, with bowels loose and stomach irritable, and this condition dated back several weeks previously. Some time after her admission she was observed to have a slight hacking cough, but her respiration was not painful or sensibly disturbed. She was given various mixtures, to strengthen her, and correct her bowels, without any material improvement. She grew more and more emaciated and feeble, and finally died quietly in a state of exhaustion on the 20th day of September.

Autopsy twelve hours after death.—Rigor mortis, lungs readily inflated and of healthy appearance, except the posterior portion of the left lower lobe—about one third of the whole lobe—and small portions of the upper lobe on the same side, and of the lower lobe on the right side; these portions were dark red, non-crepitant, of greater specific gravity than water, and susceptible of only partial inflation; mucous membrane of the bronchial tubes slightly vascular; liver, kidneys, and spleen of healthy appearance; mesenteric glands moderately enlarged; mucous membrane of stomach of the usual firmness, but vascular in streaks; mucous membrane of the small intestines not vascular, but so soft as to be easily detached by pressure with the nail; the mucous membrane of the entire colon vascular and thickened, without ulceration, and in the descending portion were small patches of fibrinous exudation which were easily removed from the reddened surface underneath. The non-crepitant portions of the lungs, examined under the microscope, were found to contain the round granular cells of pneumonia in abundance.

ST. LUKE'S HOSPITAL.

SERVICE OF DR. HEYWOOD.

LACERATION OF ONE OF THE AORTIC VALVES.

[Reported by EDWARD B. DALTON, M.D., Resident Physician.]

A MAN, 32 years of age, of small stature, robust constitution, temperate habits, and a housepainter by occupation, entered the hospital on the 18th of May, 1860, complaining that he was subject to frequent attacks of dyspnoea and vertigo. He stated that some nine weeks previously, while in the act of carrying a keg of white lead to the upper floor of one of the hotels of this city, he was suddenly seized during the ascent of the fifth flight of stairs, with a violent, sharp pain in the left side of the chest, accompanied with a paroxysm of dyspnoea and giddiness which compelled him at once to drop his burden and to cling to the balusters for support. After some fifteen or twenty minutes, however, he sufficiently recovered to resume cautiously his occupation, and for several weeks subsequently he continued to follow his trade as usual, though troubled more or less with difficulty of breathing and with attacks of giddiness. The increase of these symptoms had finally obliged him to abandon labor, though at the time of his admission here, some three weeks later, his general appearance, when at rest or in moderate exercise, was still indicative of ordinary health and vigor. Any exertion, however, at once embarrassed the respiration and produced giddiness. His feet were found to be slightly cedematous. For the first week of his residence here he suffered extremely from pain in the abdomen, supposed to be due to lead poison, from which he had previously suffered. This pain was relieved after brisk purgation,

followed by use of pot. iod. Upon auscultation a loud regurgitant murmur was heard over the site of the aortic valves, which, with the symptoms detailed, was ascribed to a rupture of one of the folds at the time of the patient's first seizure. With the exception of the relief from the abdominal pain, there was but little change in the condition of the patient until about the 1st of May, when the cedema of the lower extremities began somewhat rapidly to increase, and moist râles became audible quite generally over the posterior aspect of the chest. The cedema soon extended to the scrotum and abdominal walls, and caused so much distress that on the 18th and 19th of May incisions were made at each ankle and in the scrotum, followed for a few days with moderate relief. The cedema, however, soon returned to a greater extent than ever, and a gangrenous spot made its appearance over the gastrocnemius of the left leg, and almost simultaneously a similar one upon the scrotum. With the recurrence of gangrene the cedema of the other limb and the abdomen began to subside, and before many days entirely disappeared. There was now but little complaint of dyspnoea or pain in the chest. The sloughing progressed rather slowly during the next few weeks, until a considerable mass of the belly of the gastrocnemius, with about two-thirds of the scrotum, had come away, while from the thigh of the affected limb there was discharged, through the opening made by the slough, a quantity of thin dark-colored fluid. The patient's symptoms gradually changed to those of simple exhaustion, and on the 20th of June he died, as if from that cause.

The autopsy was made thirty-six hours after death. The lungs were found cedematous. The heart was large and flabby, and all its cavities, except the right auricle, were filled with coagulated blood. The aorta near its junction with the heart was the seat of considerable deposition of atheroma. On pouring a stream of water through the vessel, towards the heart, it met with comparatively little obstruction at the valve. A careful examination of the latter showed that the point of mutual attachment of two of the folds at the commencement of the aorta had been torn away, the folds themselves remaining uninjured and adherent to each other.

UNIVERSITY MEDICAL COLLEGE.

PROFESSOR VALENTINE MOTT'S CLINIC.

December 11, 1860.

CONGENITAL NÆVUS; REMARKS AND OPERATION. MORBUS COXARIVUS.

CASE V.—Congenital Nævus.—Girl æt. 1, has a nævus, circular in shape and an inch and a half in diameter, situated on the abdomen a little to left of and below the umbilicus. The tumor is moderately firm, does not pulsate, is reddish brown in color, and has existed from birth. This condition of things you see here, gentlemen, is almost always congenital. It sometimes appears after birth, and under these circumstances it shows itself most commonly upon the scalp. It is generally arterial in its character, but sometimes the venous element predominates. Aneurism by anastomosis of the ends of the arteries was treated of by Frier, and is described as being connected with malignant disease. The best treatise I know of on the subject is by John Bell. These tumors, though small at birth, oftentimes grow with more or less rapidity during life, either spreading from the original seat of the disease, or forming an irregular blotch upon the surface. Several similar growths show themselves in the neighborhood, which increase in size till they finally coalesce. The vigor of the arterial circulation in these tumors is occasionally such that they pulsate under the hand like true aneurism. They are not painful, but are prone to be exceedingly troublesome, bleeding when accidentally wounded. The mere scratch of a pin in a child's clothes, has been known to give rise to

profuse and even alarming hæmorrhage. When called to a case where the tumor does not grow, I would advise you not to be in a hurry to operate, for they sometimes disappear of themselves when the children grow older. The treatment is entirely local. Where the tumor is small, I have occasionally cured it by vaccinating the part. The *kali purum* has been extensively and successfully applied, destroying the tissues by its escharotic property. In using this remedy, care must be taken that it be not allowed to spread upon the contiguous tissues. One application will often effect a cure, but sometimes several are necessary. They may be excised, but owing to the very vascular character of the tissue involved, this proceeding is liable to be productive of trouble from hæmorrhage. In case the knife is used, the tumor itself should not be cut into, but the tissue around and beneath, so as to excise the morbid growth in a mass. Another mode of extirpating these growths is by ligature. If the tumor be small and prominent, a thread may simply be tied tightly around it, but if, as is generally the case, the base be large, a needle armed with a double thread may be passed through it, on a level with the surrounding surface, and these two threads may be made each to include a separate portion of the tumor. Sir B. Brodie was I think the first who introduced the plan, of inserting two needles through the base of the nevus, at right angles with each other, passing the ligature underneath, and securing it firmly around the base of the tumor. I do not like the ligature in these cases, as it is troublesome and very painful to the patient. My plan now generally is to use the actual cautery. Although it seems a barbarous proceeding, and one which mothers are loth to have their children submit to, it is, in my opinion, the safest, most effective, and least painful. The cautery needles should be small and blunt at the point, so that they may burn their way into the tissue, rather than penetrate by mechanical force. The base of the swelling should be the part subject to the cautery, as it is obviously from the base it gets its nourishment. The needles should be heated to a white heat, as they are thereby most effectual, and far less painful. They are best heated by the alcohol vapor lamp. You observe in this case the tumor is larger than its base, overhanging it on all sides, so that it appears to grow from a broad pedicle. The mother states that it has grown considerably since the birth of the child, so that interference on our part is called for, and the plan I would recommend is the use of the cautery.

CASE VI.—Hip Joint Disease, etc.—H. B., æt. 3 years, is a pale, scrofulous-looking child. The mother states, that eight months ago the child had severe pain in right knee, and her medical attendant treated it as disease of that joint. The child has now, however, unmistakable signs of disease of the corresponding hip. Pain in the knee, gentlemen, is one of the first and prominent symptoms of this disease, and is a result of those curious nervous sympathies which we cannot explain. If a child has pain in the knee without obvious cause, look after the hip-joint. Here we see a small abscess on the inner side of the middle of the thigh. This might be mistaken for psoas abscess, pointing downwards, but the mother says the abscess first began here. Psoas abscess, you know, begins along the psoas muscle, and follows the fascia along its course, and emerges under Poupart's ligament, along the tendon of this muscle, and that of the iliacus internus. If this were a psoas abscess, then it would first have appeared in that locality. It is probably connected with the diseased joint; but be that as it may, when there is tension and pain the abscess should be opened. Concerning the admission of air into the cavity of an abscess, when opened, there is a belief that it is often productive of disastrous consequences. *Air does no harm in an abscess or in a knee-joint.* In emphysema from a fractured rib wounding the lung, though the patient may be marvellously puffed up with wind, it does no harm. Hæctic fever, after puncture of an abscess is due not to air in the sac, but from inflammation extending over the lining of the abscess the result of the operation.

JOURNALS FOR NOVEMBER.

THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.—November.

ART. I. Letter from DR. STANFORD E. CHAILLÉ, on Experimental Physiology. **ART. II. Contributions to Comparative Anatomy and Physiology (*Crocodilus Mississippiensis*).** By DR. BENNET DOWLER. **ART. III. Vesico-Vaginal Fistula—Improvement on the common Yoke Speculum of Prof. SIMS.** *Improvement in the Introduction of Sutures.* By Dr. H. ESTES, Edwards' Depot, Hinds county, Miss. The fistula was circular, five-eighths of an inch in diameter, and the operation consisted in removing a strip of vaginal surface, three-eighths of an inch in width, from the circumference, the introduction antero-posteriorly of six silver sutures, and the introduction of the button or splint of Dr. Bozeman, as modified by Dr. Atter. The speculum used was the common yoke speculum, with an attachment, consisting of two lateral blades, one inch in width, closed while the instrument was introduced, then expanded to the extent of from two and a half to two and three-quarter inches, the vertical span measuring from one and a half to two inches, admitting of "perfect freedom of access to the parts concerned, thus reducing the operation to one perfectly simple, and that may be performed successfully by even the unskilful." For the introduction of the sutures, a very small trocar and canula was used, which being introduced and the trocar withdrawn, "the sutures were passed with an ease and rapidity which elicited commendation from all present." **ART. IV. Some Account of the Hot Springs of Arkansas:** communicated in a letter from A. J. WRIGHT, Esq., to Dr. SAMUEL A. CARTWRIGHT, asking for information. **ART. V. Remarks on Medical Hydrology and Mineral Waters, including the Hot Springs of Arkansas.** By Dr. BENNET DOWLER. **ART. VI. Partial Deficiency of the Vagina, with a Rudimentary Condition of the Uterus, and Probable Defect of the Fallopian Tubes; Remarks, &c.** By Dr. NATHAN BOZEMAN, of New Orleans. **ART. VII. Report of a Case of Albuminuria Gravidarum, with Remarks.** By Dr. HUMPHREY PEAKE, of Yazoo City, Miss.—The patient was about 20 years of age, married, and about six weeks previous to the writer's seeing her, had miscarried at the sixth month of her first pregnancy. The writer found her extremely anasarctous, having been unable to assume the recumbent position for nearly two weeks; the urine was highly charged with albumen, and a uterine hæmorrhage was daily exhausting her remaining strength. Under the following treatment the improvement was rapid: *R Sacchari saturni 3i; syrapi simplicis 3iv; aquæ 3xii. M. A* teaspoonful every night. *R Magnesie sulphatis, potassæ bi-tartratis, potassæ acetatis 5â, 3i; aquæ cinnamomi 3iv; aquæ 3xii. M. A* wineglassful three times a day. *R Quinæ disulphatis 3i; pulv. ferri 3ii; strychniæ, grs. ii; mucilaginis, q.s. M.* Make sixty pills. One to be given three times a day. The hæmorrhage being arrested in a few days, the first mixture was discontinued. **ART. VIII. Antigalactic Properties of Belladonna.** By Dr. S. C. YOUNG, Liberty, Miss. **ART. IX. Obstetrical Reflections, suggested by passages in the first chapter of Exodus.** By Dr. S. C. YOUNG, Liberty, Miss.—The passages extend from the 15th to the 19th verses inclusive, and suggest the following reflections: That there were at that time in Egypt persons whose business it was to assist women in childbirth; that these obstetricians were women; that the women were delivered in a sitting posture; that these midwives feared God, and regarded the interests of their patients more than the threats of the king; that these midwives were in the habit of attending both the Hebrew and Egyptian women in childbirth, or at least were familiar with the processes of labor in both classes; that the Hebrew women were more easily delivered than the Egyptian women. **ART. X. London Correspondence.**

American Medical Times.

SATURDAY, DECEMBER 29, 1860.

WITH this number we close the first volume of the *AMERICAN MEDICAL TIMES*. We shall commence the second volume on the FIFTH OF JANUARY, 1861, with largely increased facilities for rendering it attractive to the busy practitioner, in every department.

DEFECTS IN MEDICAL EDUCATION.

IN another column will be found an abstract of a paper on *Prescription Writing*, read before the Academy of Medicine, by Dr. SQUIBB, which demands more than a passing notice. While we indorse the practical suggestions of that paper, we desire to call attention to a radical defect in the education of medical men, which must be remedied, before any real improvement can be anticipated in prescription writing.

We are quite sure that we shall startle no one by an announcement of the lamentable ignorance of the learned languages tolerated in candidates offering themselves for medical graduation. Perhaps it might be permitted us to say, that the rustiness of practitioners themselves on this subject, and their consequent inability to put students to the proper tests necessary to discover their proficiency in this particular, leads them prudently to avoid treading upon the dangerous ground of a long-forgotten syntax. Any pedagogue of the vicinage, conveniently borrowed for that purpose, might easily, and with much self-laudatory grace, examine the candidates in declensions and enditica. It would save distinguished professors much time—possibly even some trouble—and their minds would not be diverted from the greater themes of therapeutics, chemistry, and physiology, by the necessity of ransacking the storehouse of memory for rules of quantity or construction buried among the rubbish of bygone memorabilia.

The fact that all scientific terminology must ever depend upon the Latin and Greek languages for its root and basis, is the best argument in favor of the importance of making those languages an indispensable prerequisite to any professional degree, whether in law, medicine, or theology. Had the fathers in any science written their own vernacular, what an incongruous and Babel-like medley of tongues would not the learning of this world have been treasured in! Fortunately, the classic tongues of the ancient civilized world—the Latin in the West, and the Greek in the East—have always retained their ascendancy in the midst of the languages of the Romanized nations, and as affording the purest idiom, have been ever selected by the learned to preserve the record of their writings. Hence all the greatest works in any and in every department of learning, down to the beginning of the last century, were written in Latin or Greek. Even when other languages might have been used, these were preferred, as affording, among the

scientific, the easiest medium of comprehensive and intelligible communication. The great works of Boerhaave, Haller, Stahl, Sydenham, Zacchias, Morgagni, etc., in Medicine; of Fortescue, Selden, Grotius, Hubesius, and Heineccius, in Law; or Leibnitz, Descartes, and Bacon, in Philosophy; or the Benedictine Historians of France and Italy, not to mention the Fathers in Theology;—all were purposely written in Latin. Many of these are not translated, and their treasures are therefore accessible only to the very learned; for there are learned men, so called, at the bar and the bed-side, who would be puzzled to conjugate a deponent verb, and would fairly die of prosodic pain in attempting to scan a Sapphic verse.

But these are extreme illustrations of the importance of a dead language, and with which a man need not be profoundly familiar in order to become either a great physician or surgeon. Still, nothing is lost in obtaining possession of a key which can unlock the very penetralia of all literary stores.

What we would more particularly insist upon, is the omission to require, in candidates, satisfactory evidence that they know enough at least of Latin to read and write correctly the prescriptions which they may put forth. We have more than once consulted, with feelings of deep mortification, apothecaries' files, and found among the treasured formulæ of the wise and great, such gross grammatical errors in Latin, as led us to believe that the person, whether as student or doctor, could certainly never have been familiar with the simplest rudiments of that tongue in which he was venturing to prescribe fatal drugs, with directions for their use; while, perhaps, a still more ignorant apothecary was to be the *minister et interpres* of the writing. We are well aware that it will be said, a knowledge of Latin is always inserted as among the conditions precedent to graduation, but to what extent is evidence of this fact required? Will it be pretended that an ascertainment of this qualification is ever rigorously enforced?

Now it follows from this, that, besides never reading an author in the original tongue, students are constantly being admitted to practice who cannot intelligently read Latin prescriptions either in books or on their preceptors' tablets, simply *guessing out* what was meant by a haphazard remembrance that such a drug is usually administered in such a way and at such intervals. This stereotyping of knowledge renders it formalistic, and the man becomes tied down to the rules he has learned by heart, through his inability to stretch his wings and soar upwards into the heavens of observation. Suppose Sydenham had never been translated, how many of the medical graduates of the present year would then be found able to interpret the spirit and the intention of his prescriptions? Probably not one in ten. We might say much more on this subject, and even give specimens of prescriptions showing not only the ignorance, but the danger to health which might arise from them, in the hands of those who were not themselves either intuitively wise, or good guessers, were it calculated to throw any additional light upon this trite topic. We are convinced that too many physicians are already aware of this desecration of the old canons of medical education, to need to be reminded of the necessity of checking the levelling of all educational standards down to the merest apology for learning. Let the colleges then look to it that they forget not to *enforce* a knowledge of the Latin, by a rigorous examination as to proficiency in it, before bestowing a degree.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Dec. 8th, 1860.

JOHN WATSON, M.D., President, in the Chair.

ON PRESCRIPTION WRITING.

Dr. EDWARD R. SQUIBB read a paper on the *Proper Method of Prescription Writing*, of which the following is an abstract:—The necessity for information in the nomenclature and language of prescriptions was insisted upon not only in view of the liability to error and misapprehension, but also to bring up and keep this collateral subject to the present condition of science. The reasons why this branch of medical practice is so far behind the age, in general, are found first in the supposed secondary or trivial nature of the subject; secondly, in not recognising the fact that progress in general science entails a necessity for change and improvement in whatever relates to it; and thirdly, a failure on the part of teachers to give due prominence and importance to this feature of medical education, and the little attention given by teachers to the Pharmacopœia and its very plain, concise terminology. In addition to these, errors and careless practices here have even a greater tendency than usual to perpetuate themselves through habit, etc. As the proper use of language always denotes refinement and good taste in the literature and social intercourse of society in general, so the same element will afford the same indication in professional literature and association, whilst in the latter it must be of much more importance. As an illustration of the necessity for drawing attention to this subject it was stated that prescriptions for the mild chloride of mercury from six medical teachers had been casually met with in not one of which the proper officinal name was given to it, and four out of the six gave to it names that were positively incorrect, whilst one in calling it the proto-chloride gave it the name which now belongs only to corrosive sublimate.

The occasional changes in scientific chemical nomenclature arising from greater accuracy in the equivalent numbers of metals, etc., prove conclusively the wisdom of the course adopted in the Pharmacopœia of seizing upon some characteristic quality or color, as mild, corrosive, red, yellow, etc., rather than upon a strict chemical nomenclature that is subject to confusing mutations. Many of the more common inaccuracies, superfluities, and improprieties in terminology, were then pointed out in detail, and brought to the standard of the Pharmacopœia, showing conclusively that common usage is very redundant in language as well as incorrect and inelegant. Imperfect and confusing abbreviations, and the use of proper names of persons in connexion with articles of the *materia medica* which have distinctive officinal titles, are referred to, and strongly condemned, the latter on the ground that Turner's cerate is exactly upon the same basis as Brandreth's Pills. The adoption of the French termination *ine* for Quinia, Morphia, Veratria, etc., and their derivative salts, was strongly condemned, first upon the ground that we are not a French people, and therefore should not embrace among our literary licences that of the use of French Latin: and secondly upon the ground that our own terms Quinia, Morphia, etc., common to both Latin and English, and conforming to a correct chemical system, are shorter, better, and more elegant. The danger and impropriety of directing solutions of salts of morphia by conventional names is alluded to in strong condemnation. The size, form, and style of prescriptions were then referred to. Prescriptions are commonly written upon paper so small that plain writing is from this cause impracticable, and habits of cramped style and bad abbreviations are fostered. A prescription should be a plain terse note to the pharmacist—should be written on nothing less than note paper—should be folded and addressed to some parti-

cular pharmacist—and should be merely transmitted to such pharmacist by the patient or attendants. It is as legitimately the property and voucher of the pharmacist as is any other note he receives, or as a receipt for money is, and the claim of the patient to it on the ground of having paid for it is unfounded; whilst his obtaining or retaining it is a bad practice which conduces to empiricism and often to the improper and dangerous use of medicines. The details of writing a correct and elegant prescription were then alluded to, with one or two important suggestions for improvement. First, the plan of Mr. A. B. Taylor of Philadelphia was strongly recommended, whereby the signs for the ounce, drachm, and scruple and the Roman numerals are abandoned, and the number of grains written in plain Arabic figures. Thus instead of gr. xxiv. we should have gr. 24, and instead of ℥ij. ℥ij. we should have gr. 160. The signs for ounce and drachm might then be left for fluids alone, and thus offer a characteristic distinction between weight and measure. The directions to the pharmacist to make into powders, pills, etc., as well as the directions to be put upon the label, should always be written in plain English, for various reasons, some of which are stated; and the practice, occasionally met with, of over-loading prescriptions with prolix details intended for the patient alone, was criticised and condemned, at the same time that it is strongly recommended that the dose never be omitted from the prescription. The prescription should always have the full date appended to it, and should not be signed by initials or a *nom de plume*, but by the full surname at least of the prescriber, and that legibly written.

ON MEDICAL METROLOGY.

Dr. SQUIBB then read a second paper on Medical Metrology, of which we give the following abstract:—The confusion existing in the use of weights of the same name but different value, as in the case of the troy and avoirdupois pounds and ounces—the necessity of pharmacists keeping both sets, the one to buy and sell by, the other to compound by—and the failure on the part of the medical profession in its attempt to enforce the provisions of the Pharmacopœia in the use of the troy pound and ounce, were given as the primary circumstances which render a change in the present system necessary. This change, though imperative in the practice of making preparations for prescription uses, is by no means so much needed in prescribing and compounding prescriptions, for although pharmacists generally fail to supply themselves with the troy ounces, and therefore use the 9 per cent. smaller avoirdupois ounce in making tinctures, etc., yet they always have the divisions of the troy ounce from two drachms downward, for prescription uses. Tinctures of opium, cinchona, etc., are therefore commonly made by the use of the avoirdupois or small ounce. The measure of the menstruum, however, which governs the quantity of the resulting preparation, being taken correctly, because there is no confusion in this respect except that which arises from the commonly incorrect graduation of the measures, the resulting preparation will be deficient in medicinal strength just in proportion as the avoirdupois ounce is lighter than the ounce intended by the Pharmacopœia, namely 9 per cent. But when these tinctures come to be used in prescription, they are used as being of full strength. The practical difficulties to be overcome in the change are, first, the necessity for two sets of weights of different value, and secondly, the use of the smaller weights where larger are intended. The use of avoirdupois weights cannot be prevented nor controlled because it is the common legal commercial usage.

The Council of Medical Education and Registration of Great Britain, in performing that part of its duties which consisted in consolidating and revising the British Pharmacopœias, has adopted a change by which the troy weights are altogether abandoned, and the common avoirdupois weights are substituted for them. But as the avoirdupois ounce was not well adapted to medical use because it contains a fraction of a grain ($437\frac{1}{4}$ grains) and because it is

not capable of being divided without still more troublesome fractions (as $218\frac{1}{2}$ grains, $109\frac{1}{2}$ grains, $54\frac{1}{2}$ grains,) it was decided to adopt a new division of this ounce, corresponding in names and numbers with the established apothecaries' division of the troy ounce,—namely to divide the avoirdupois ounce into 480 parts to be called grains, 20 of these to make a scruple, and 60 a drachm, thus making a new drachm, scruple, and grain, of different and inferior value to the old one. The value of the new drachm in old grains is nearly fifty-five grains, and the grain is $\frac{1}{91145}$ of the old grain. This plan is stated to accomplish the primary object in view in a simple way easily understood, but to be liable to many serious disadvantages, particularly its use in this country. First, it makes a radical change and increased confusion, which reaches even to the practice of prescribing and compounding prescriptions, where it was not absolutely required, and yet does not attain to the advantages or perfection of the French metrical system; whilst this latter system is so rapidly becoming universal, with advantages so pre-eminent, that it is on all hands confidently looked upon as the system to be adopted by all at a no very distant day. Another grave disadvantage for our use is that it could no more be enforced upon our pharmacutists than the present troy system, while it involves the necessity of more new weights, and setting aside of old ones. The result of its adoption here would probably be similar to the present result in the instance of the troy weight. Some would buy them and others would not, and the present confusion would consequently be increased. Another disadvantage would be its illegality here, and the liability to meet with resistance from the law, since to create a new grain of a value inferior to that of the legal standard would probably involve the same principle and the same penalty, though not done with the same object, as the creation of a gallon measure to be so called, but to be only $7\frac{1}{2}$ pints. It is nevertheless highly desirable, in view of our common language, literature, and practice, that our Pharmacopœia and professional usages should be as far as practicable uniform with those of Great Britain. They have made their change without the slightest reference to our wants or abilities, and we are now forced to adopt their change, or to sacrifice the important advantages of uniformity. In order to obtain an unbiased expression of the judgment of the Academy as to whether the advantages to accrue from uniformity were sufficient to counterbalance the disadvantages of the system as applied to the necessities of this country, the writer of the paper then introduced a preamble and resolutions as follows:

Whereas, This Academy recognises the expediency of making some change in medical metrology whereby the materia medica may be better secured against the effects of the common disregard of the present troy weights of the Pharmacopœia; and whereas it is understood that the Committee of Final Revision and Publication of the Pharmacopœia has not yet taken action upon this subject, therefore

Resolved, That this Academy offers its judgment upon the subject, as a voluntary contribution to the Committee of Final Revision and Publication of the Pharmacopœia, with a view to aid that Committee in arriving at the best results that may be in its judgment practically attainable.

Resolved, That it is the judgment of this Academy that the change recently adopted for the consolidated British Pharmacopœia, is the best that can at present be suggested, and that in view of a desirable uniformity with the British Pharmacopœia this change is recommended for adoption in the United States Pharmacopœia.

After an apparent general concurrence in the preamble and first resolution, and a few remarks upon the second resolution, the Academy did not appear to be willing to adopt it against the disadvantages enumerated, at least until after the matter should lie over until the next meeting. The writer of the paper then stated that in the event of the Academy being unwilling to adopt this resolution, and desiring to go further into the subject in its various bearings, he had prepared some account of another change which he proposed as a substitute for the British change, but which he had not proposed to present until some definite action was taken upon the resolution, since he feared that any views likely to be held by a single individual might be one-sided or partial, and might confuse, if they did not prejudice, the action of the Academy upon the

resolution. The remainder of the paper, proposing the substitute, was, however, directed to be read, in order that the Academy might have the whole subject before it at once.

The proposed substitute was, first, that the present table of weights and measures of the Pharmacopœia be continued undisturbed, but be restricted to prescription uses alone; and that the French table of weights and measures, and also a compound table showing the equivalent values of the two tables, be added to this department of the Pharmacopœia. This is for the purpose of affording an authoritative reference for the comparative value of the French denominations, and to familiarize physicians and pharmacutists with the French system and its values, in view of its ultimate adoption. Secondly, to abandon the use of absolute and arbitrary weights altogether in the formulas and processes of the Pharmacopœia, and to substitute the term parts, to mean parts by any weight whatever. The primary object of all processes for compounding medicinal preparations is to preserve an invariable ratio among the ingredients and elements of the mixture; and as arbitrary weights are used chiefly to express these ratios, they become accurate and useful only in proportion as they agree among themselves. Then as the present weights do not agree among themselves, whilst the term parts is invariable, this change must accomplish the object in view, and that without adding anything to the existing confusion among arbitrary weights;—without making any radical change whereby new values to old terms have to be learned;—without revolutionizing the prescription usages or practice where immediate change is not imperatively needed;—without interfering with doses or effects in any way;—without any risk of conflict with law or established usages;—and without involving the least necessity for new weights or appliances of any kind, since any possible system of weights is equally applicable. Two or three advantages of this method are alluded to and discussed without hiding their true force and value, and the conclusion is then arrived at that this is the most simple and easy change that the writer can suggest; but this judgment is advanced as that of a single individual only, and without the least desire to bias or control any one, beyond the legitimate influence of the arguments, and the truth. The paper closed with the request that as far as the proposed substitute is concerned the subject may be left entirely open to the unbiased action of the Committee of Revision, and that the Academy agree unconditionally to abide by the result of the decision of that Committee, no matter what that decision may be.

In the discussion which followed the paper there appeared to be a unanimous sentiment in favor of the proposed substitute, and the second resolution, on being put to vote, received but one affirmative voice, whilst the negative votes were very general. The judgment of the Academy is very decidedly opposed to the adoption of the British change, and decidedly favorable to the proposed substitute.

Medical News.

MARRIAGES.

COWAN—CRAIG.—Married in Danville, Ky., on the 13th inst., at the residence of the bride, by the Rev Lewis W. Green, D.D., Dr. GEORGE COWAN, to Miss LETTIE, daughter of the late Wm. CRAIG, all of that place.

MAGNETIC LIGHT.—At a late meeting of the *Acad. of Nat. Sci.*, Phila., Prof. ROGERS of the University of Pennsylvania, illustrated the method of producing an intense light by placing the poles of a galvanic battery in contact with a small thread of mercury.

ERRATUM.—In the last number, page 447, the remarks commencing "I am happy to have an opportunity," &c., should have been credited to Dr. A. K. GARDNER.

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